WL/CM-03NL(E crust) Network video doorphone system

Please don't abandon the products as wastes at will.
It should be recycled and disposed separately. Thanks!

USER'S MANUAL

(Edition:V1.00)

Instructions for relay equipment wiring

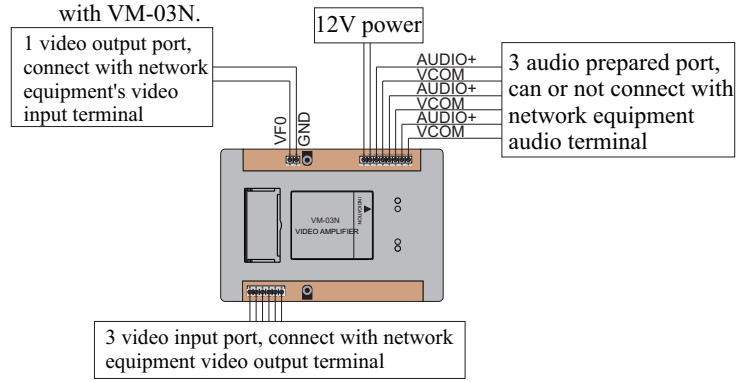
ˇVM-03N video amplifier

)١(Connect VCC,GND terminal with DC12V power's positive and negative polarity respectively

(2)VFO,GND is one video output, connect with network equipment's TV+, TV- respectively

(3)VF1~VF3, GNDare three video outputs, connect VF1~VF3 terminal with network equipment's TV+, and connect GND terminal with network equipment's TV-

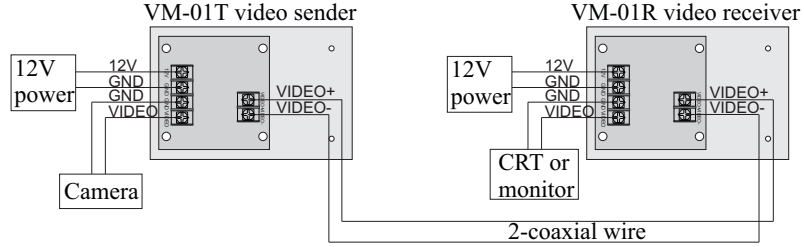
(4)VCOM,AUDIO+are three audio ports, it is convenient for user only, you can connect audio wire with VM-03N, also you can select not connect audio wire with VM-03N.



ˇVM-01T video sender & VM-01R video receiver

(1)VM-01T video sender: ˇ +12V,GNDˇterminal connect respectively with DC12V power's positive, negative polarity. ˇVIDEO,GNDˇconnect with camera; ˇVIDEO+,VIDEO-ˇconnect with VM-01R's ˇVIDEO+,VIDEO-ˇ

(2)VM-01R video receiver: ˇ +12V,GNDˇterminal connect respectively with DC12V power's positive, negative polarity. ˇVIDEO,GNDˇconnect with CRT or monitor's video input and video GND; ˇVIDEO+,VIDEO-ˇconnect with VM-01T's ˇVIDEO+,VIDEO-ˇ



Note: there is an electrograph(RV1), switch(SW1) in VM-01R video receiver's electronics board, RV1 is whiteness adjuster, SW1 is color adjuster. Dial SW1 downward to switch it ON, normally, when distance is 500 m, ˇ1ˇ is ON, others are OFF; When the distance is 800 m, ˇ1ˇ,ˇ2ˇ are ON, others are OFF; when the distance is 1200 m, ˇ1ˇ,ˇ2ˇ,ˇ3ˇare ON, others are OFF; when the distance is 1500 m, the above are ON(ˇ1ˇ,ˇ2ˇ,ˇ3ˇ are dialing times). Please select accordingly when in actual use, and match RV1 to achieve the best video quality.

14ˇSupplemental manual for network relay equipment(attachments)

Attached supplemental manual for network video door phone's relay equipments

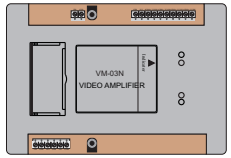
Relay equipment features

ˇVM-03N video amplifier: amplifies the video signal for long distances

ˇVM-01T video sender & VM-01R video receiver: VM-01T is sending and VM-01R is receiving, they must exist at the same time, it mainly solves the long-distance -transferring-signal problem.

Relay equipment technical parameters

ˇVM-03N video amplifier:

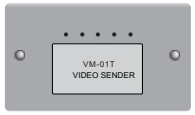


a)Working voltage: ١2V DCˇ١٠١

b)Standby current: ˇ15mA

c)Working current:ˇ120mA

ˇT٠١-VM video sender:

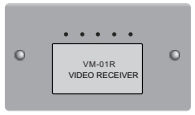


a)Working voltage:١2V DCˇ١٠١

b)Standby current: ˇ200mA

c)Working current:ˇ300mA

ˇR٠١-VM video receiver



a)Working voltage:١2V DCˇ١٠١

b)Standby current: ˇ200mA

c)Working current:ˇ300mA

Relay equipment selection

ˇSelection video relay equipment for network system

ˇWhen transmitting video signal, if you are using branches, please select the VM-03N video amplifier between the network equipments

ˇWhen video transmission distance is equal or over 500 M, please select one VM-01T video sender and one VM-01R video receiver between network equipments

ˇWhen transmitting video signal, if you are using branches and the transmission distance is more than500 M, please select VM-03N video amplifier, one VM-01T video sender and one VM-01R video receiver between network equipments

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1ˇSystem Introduction

ˇEncode construction, easily installation and debug.
ˇThe indoor phone is installed by hanging up, the door station or the management center can call the indoor phone and can communicate with each other. This system has the functions of alarm and remote control unlock.
ˇ1/3' CCD used in the door station, and LED enables users to identify visitors clearly even at night.
ˇThe door station has different password for users to unlock the door, three digits or four digits Room No. optional..
ˇOne door station can connect 100 modules. One module can connect 4 indoor phones which can be used in different floors.

2ˇSystem Characteristic

ˇDurable materials have been used to encode a long life time.
ˇStandby current consumes little electricity, economical electricity.
ˇDing Dong or 3 different ring tones available.
ˇDifferent models indoor phone are optional.

3ˇSystem Combination

Notice: For different purposes, we provide different switches and modules. WL-03NQH-1/2/4 and CM-03NQH-1/2/4 are with iron shell. WL-03NQH1/2-162, CM-03NQH1/2-162, WL-03NQH-216 and CM-03NQH-216 are with plastic shell. They have 1, 2 and 4 route way for consumer's different purposes.

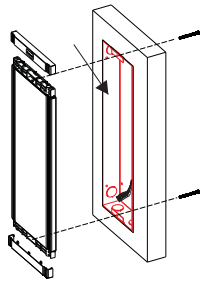
ˇSystem combination for video system:
(1)Door stationŁCM-03NLˇCM-03NL-CˇCM-03NLAˇCM-03NLA-C
(2)Indoor phoneŁCM-02NLRGˇCM-02NLRG-CˇCM-02NLRHˇCM-02NLRH-Cˇ
CM-02NLRMˇCM-02NLRM-CˇCM-02NLRM1ˇCM-02NLRM1-Cˇ
CM-02NLRaMˇCM-02NLRaM-CˇCM-02NLRbMˇCM-02NLRbM-Cˇ
CM-02NLRIˇCM-02NLRJˇCM-02NLRVˇCM-02NLRV-C
(3)ModuleŁCM-03NLCH-162 or CM-03NLCH
(4)PowerŁ°-PSEˇPS-9
(5)SwitchŁCM-03NQH-1(1 route way)ˇCM-03NQH-2(2 route way)ˇ
CM-03NQH-4(4 route way)ˇCM-03NQH1-162(1 route way)ˇ
CM-03NQH2-162(2 route way)ˇCM-03NQH4-216(4 route way)
(6)Conformity unitŁCM-03NZH(1/2/4 route way)(used in network function)
(7)Management unitŁCM-03NHMC(used in network function)
(8)Wall phoneŁCM-03NWD(A)(Optional)

ˇSystem combination for audio system:
(1)Door stationŁWL-03NLˇWL-03NL-CˇWL-03NLAˇWL-03NLA-C
(2)Indoor phoneŁWL-02NLFDˇWL-02NLFHˇWL-02NLFCˇWL-02NLFH1ˇWL-02NLFL
(3)ModuleŁWL-03NLCH
(4)PowerŁ²-PSEˇPS-5EˇPS-9

13ˇInstructions for easy malfunction

Malfunction phenomenon	Malfunction reason	Solving instructions
Door station doesn't work	Check the system's power supply indicator, see whether it light or not; check the power wire's connection ways, see whether it is right or wrong	If indicator doesn't light, it represent power off, according to correct diagram to connect the power with door station.
All users of whole building can not unlock	Check whether the wire from door station to power and power to electrical lock is correct or not, whether the electrical lock is compatible with the system or not(this system is signal -unlock), whether the door station's bus wire is connected correct or not	Check if there is +12V output power at the LOCK port of the door station when unlock. If there is no power, change the door station. If there is, check if the connection is correct or if there is something wrong with the lock.
The door station cannot call all indoor phones.	Main wires are connected wrong. Short circuit or broken wire.	Correct the connections according to the connection map, and use another good m achine to test.
Indoor phones has raster but no picture	If whole building's indoor phone hasn't pictures, Please check whether the wiring from door station video output VIDEO to module video input is divided by negative and positive accordingly or not. If individual indoor phone hasn't pictures, please check whether its video-wiring is correct or not, or the indoor phone is damaged or not. Also please check the video amplifier is power on or off, input and output port is corrected right or not.	Power on the video amplifier, connect the video amplifier's video input and output port correctly with indoor phone and test
Can not network with management unit	If all door stations can not network with management unit, check whether the management unit's bus wire's connection is correct or not, whether the management unit is workable or not; if parts of door stations can not network, please check whether the network port , which is the nearest to the management unit , is damaged or not.	Connect the wires correctly according to diagram, and change a good machine to test
IC/ID card can not unlock	Whether they are registered or not; whether they are damaged or not; whether the reading ways is correct or not; whether the door station is damaged or not	IC/ID card shall be less than 50 mm to sensitive area. If all of cards can not unlock, emphasize checking door station's wiring; if individual card can not unlock, it represent the card isn't registered or canceled record or damaged.

2.Door station's installation and notice:



Iron door
Door station's panel
Door station's back cover
4 ˇ 45 Screws
Small cover

Installation steps on iron door:

(1)Drill a rectangular hole on proper position of the iron according to door station installation size.

(2)Pull out the two small covers. Take off the screws with the attached inner hexagon wrench, and then take off the door station back cover. Fix the back cover on the iron door. Then lock the door station from the back cover with the attached two M4ˇ45 screws and fixed steel sheet.

(3)Push the small covers and firm it.

Installation steps on wallŁ

(1)Drill a rectangular hole on proper position of the wall according to door stati on installation size.

(2)Drill four ¦6mm holes as the door station installation size on the groove. Fix the back cover on the groove with the attached plastic tubes and screws (¦4.2ˇ40mm).

(3)Press the front cover on the back cover, then use 2 M4ˇ25 inner hexagon screws to lock them.

:Notes

The holes should be drilled according to the size of door station and relative(١) .installation size on iron door or wall

Make sure that when you install the door station that is mounted closely to the٢) door or wall there should be no gap

. install the door station on the side that usually closed(٣)

Do not install the door station on where it is exposed to direct rain or sunlight(٤)

CM١٦٠~CM١٤٠between : Installation height(٥)

(5)SwitchŁWL-03NQH-1(1 route way)ˇWL-03NQH-2(2 route way)ˇ WL-03NQH-4(4 route way)ˇWL-03NQH1-162(1 route way)ˇ WL-03NQH2-162(2 route way)ˇWL-03NQH4-216(4 route way)

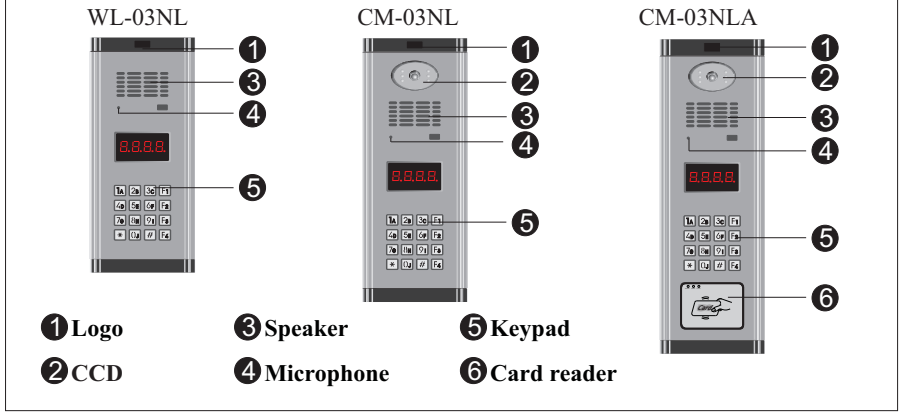
(6)Conformity unitŁWL-03NZH(1/2/4 route way)(used in network function)

(7)Management unitŁWL-03NHMC(used in network function)

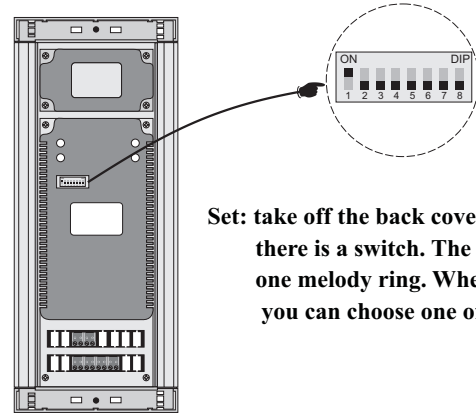
(8)Wall phoneŁWL-03NWD(A)(Optional)

4ˇProduct conformation and function

ˇDoor Station



: Set chord ring for door station:(only available at the system with ˇMelodyˇ ring)

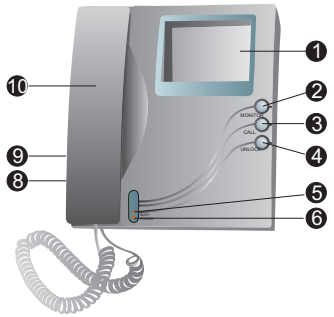


door station inside

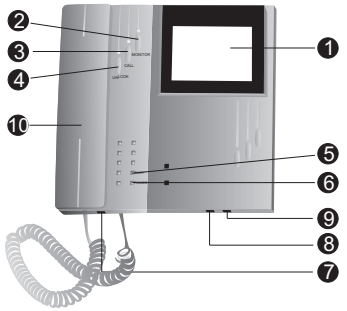
Set: take off the back cover of the door station(as the figure shown) there is a switch. The number(1~3) on the switch stands for one melody ring. When you turn the switch to the one you can choose one of the melody ring.

¨Indoor Phone

CM-02NLRG



CM-02NLRH



❶ **Display screen** ❹ **Unlock** ❼ **Volume** ❿ **Handset**

❷ **Monitor** ❺ **Busy Indicator** ❽ **Contrast button**

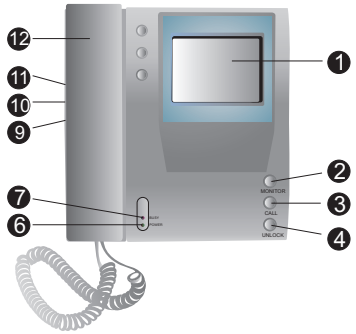
❸ **Call** ❻ **Power Indicator** ❾ **Brightness button**

Note

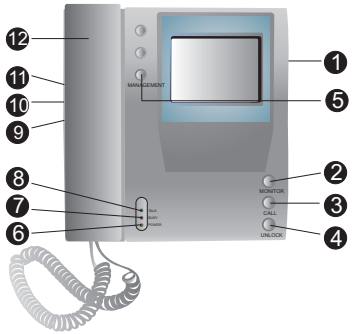
❸ **Call:** call management unit by handing off the handset and pressing the call button; if you only press the call button then it will be an emergency call.

¨Indoor Phone

CM-02NLRM/CM-02NLRM1



CM-02NLRaM Main Indoor Phone



❶ **Display screen** ❺ **Management** ❾ **Contrast button**

❷ **Monitor button** ❻ **Power Indicator** ❿ **Brightness button**

❸ **Call button** ❼ **Busy Indicator** ⓫ **Ringing Volume**

❹ **Unlock button** ❽ **Talk Indicator** ⓬ **Handset**

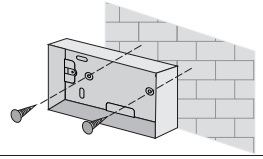
Note

❸ **Call:**(1)<u>For normal indoor phone:</u> take off handset for calling management unit; otherwise for emergency call.

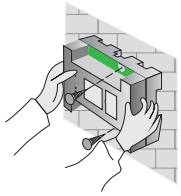
(2)<u>For main indoor phone</u>: internal call broadcase among extra indoor phones in the same apartment.

❺ **Management:**take off handset for calling management unit, For main indoor phone; otherwise for emergency call

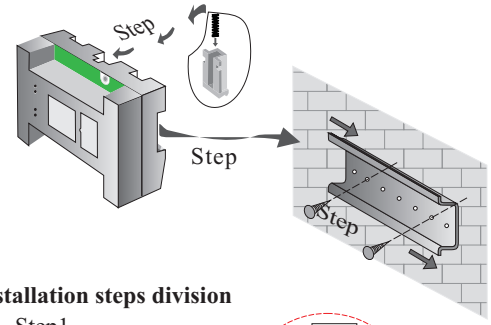
(5)Module

Model	Size	Installation diagram
WL-03NLCH	86 ˇ ٨٦ ˇ mm٤٥	
CM-03NLCH	146 ˇ ٨٦ ˇ mm٤٥	

(6)Module and Network switch

Model	Size	Installation diagram (1)
١٦٢-NLCH٠٣-CM	١62 ˇ 110 ˇ 45mm	
٢-١٦٢NQH٠٣-CM	162 ˇ 110 ˇ 45mm	
٤-٢١٦NQH٠٣-CM	٢16 ˇ 110 ˇ 45mm	
PS-2E	124 ˇ 90 ˇ 70.5mm	
PS-5E	124 ˇ 90 ˇ 70.5mm	

Installation diagram (2)

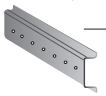


Accessory

Slip buckle

Spring

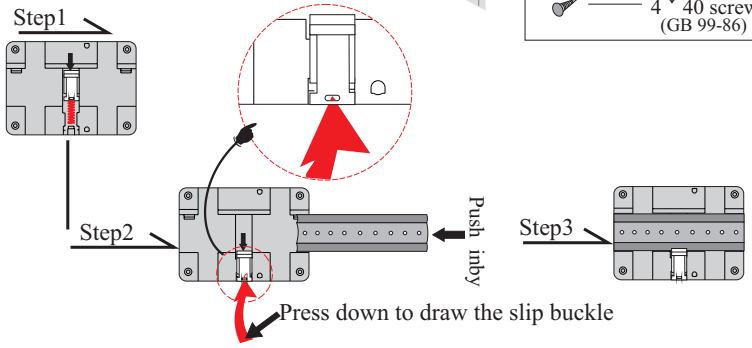
Self-buy accessory



U type guide orbit (E/AL NS 35)

4 ˇ 40 screw (GB 99-86)

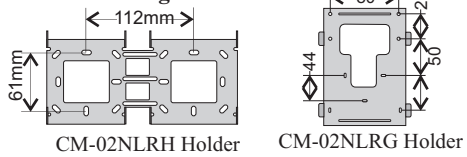
Installation steps division



(3)Installation size and diagram of indoor phones

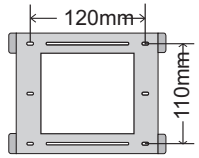
Model	Size
CM-02NLRG	205 ˇ 220 ˇ 65.5mm
CM-02NLRH	224 ˇ 218 ˇ 59mm

Installation diagram

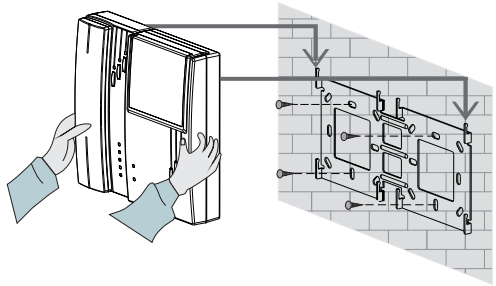


Model	Size
CM-02NLRM	210 ˇ 220 ˇ 68mm
CM-02NLRI	235 ˇ 200 ˇ ٤8mm
CM-02NLRJ	292 ˇ 198 ˇ 47mm
CM-02NLRV	250 ˇ 224 ˇ 49mm

Installation size



Installation diagram:



Installation steps:

screws as the installation٤ Fix the holder on a suitable position on wall with (١)
.diagram
)٢(Hang up the indoor phone on the holderˇ

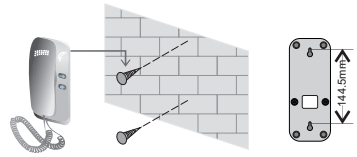
Note:

.Do not install near moist place and burner(١)
.Do not install near the place where causes strong electronic magnetic field(٢)
)Such as TV loudspeaker(ˇ
Do not fall or punchy strike(٣)
.Do not clean by wet cloth or volatile reagent(٤)
.because of high voltage inside, Do not dismantle optionally(٥)
.Keep the glass of the door station and indoor phone clean(٦)

(4)Audio indoor phone

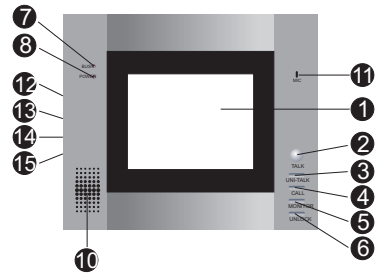
Model	Size
WL-02NLFD	201 ˇ ٨0 ˇ 67mm
WL-02NLFH	216 ˇ 94 ˇ 59mm
WL-02NLFC	203 ˇ 89 ˇ 64mm
WL-02NLFH1	220 ˇ 85.6 ˇ 49.5mm
WL-02NLFL	100 ˇ 210 ˇ 32.5mm

Installation diagram

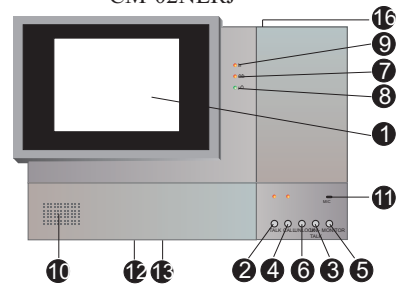


˙Indoor Phone

CM-02NLRI



CM-02NLRJ

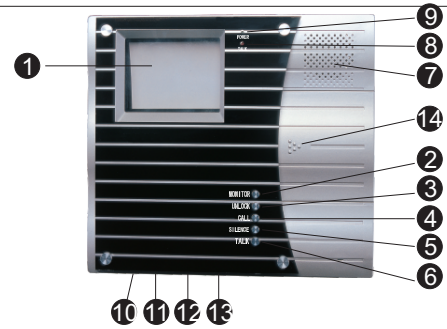


❶ **Display screen** ❺ **Monitor** ❾ **Talk Indicator** ⓭ **Contrast button**
❷ **Talk button** ❻ **Unlock button** ❿ **Speaker** ⓮ **Ringing Volume**
❸ **Mute button** ❼ **Busy Indicator** ⓫ **Microphone** ⓯ **Voice volume**
❹ **Call button** ❽ **Power Indicator** ⓬ **Brightness button** ⓰ **Door panel**

Note

❸ **Mute :mutes the indoor phone˘s loudspeaker**.

¨CM-02NLRV Indoor Phone



❶ **Display screen** ❺ **Silence button** ❾ **Power Indicator** ⓭ **Voice volume**
❷ **Monitor button** ❻ **Talk button** ❿ **Brightness button** ⓮ **Slide cover**
❸ **Unlock button** ❼ **Speaker** ⓫ **Contrast button**
❹ **Call button** ❽ **Talk Indicator** ⓬ **Ringing Volume**

Note

❹ **Call:** (1)To call management unit---first press talk button firstly, then press this button,
(2)For emergency call , press this button directly.

❺ **Silence:**Mutes the indoor phone' s loudspeaker.

5˘System components and parameters:

1. CM-03NL Video Door Station

a)Working Voltage:V١٨ DC˘10%

b)Standby Current:˘50mA

Working Current)c:˘mA٣٨٠

d(Camera:١/٣' CCD

Viewing angle:92.8˘

Min Luminance:0.1Lux

Lens:F=3.6

e)Environment Temperature:-25˘+70˘

f)Humidity:45%˘95%

2. WL-03NL Audio Door Station

a)Working Voltage:١2V DC˘10%

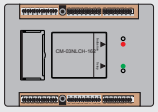
b)Standby Current:˘75mA

c)Working Current:˘mA٢٥٠

٢٥:-Environment Temperature)d˘+٧٠˘

e)Humidity:45%˘95%

3. Module



١٦٢-NLCH٠٣-CM

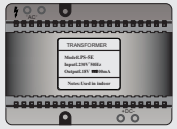
NLCH٠٣-CM

a)Working Voltage:18V DC˘١٠١

b)Standby Current:˘8mA

c)Working Current:˘170mA

4. PS-5E Power

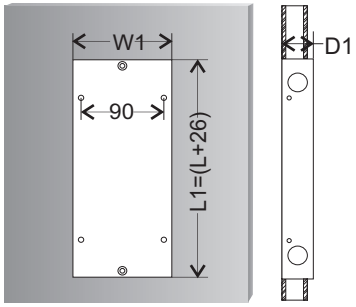


a)AC Input Voltage: ˘ ٢3V٠ AC$^{+10\%}_{-15\%}$

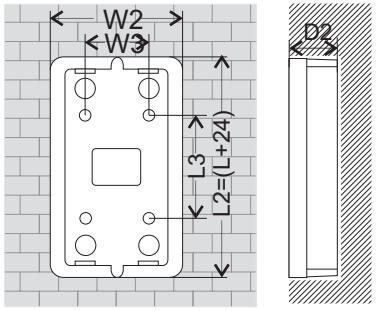
b)DC Output Voltage:V١٨ DC/800mA

12˘Installation

١.Installation size :)aluminum alloy cover length=L(



Installation size on iron door



Installation size on wall

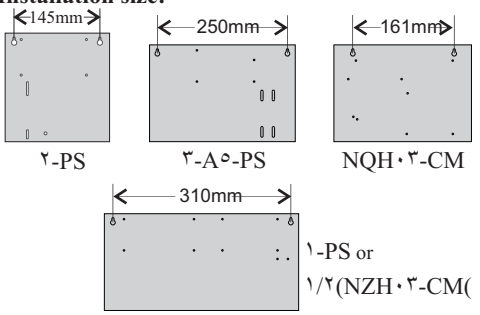
(1)Installation size table for aluminum alloy door station seriesŁ

Model	Cover length L(mm)	Door station size(mm)	Installation size on iron door (mm)	Installation size on wall(mm)
NL٠٣-WL	268	304 ˘ ١ ˘ ١١	296)١L(˘١١١)١W(˘١١)١D(	٢١٤)٢L(˘١٢٦)٢W(˘٤٢)٢D(
NLA٠٣-WL	348	384 ˘ 140 ˘ 52	٣٧٦)١L(˘١٠٨)١W(˘٣٨)١D(	٣٧٤)٢L(˘١٢٦)٢W(˘٤٢)٢D(
NL٠٣-CM	312	348 ˘ 140 ˘ 52	340)١L(˘١١١)١W(˘١١)١D(	338)١L(˘١١١)١W(˘١١)١D(
NLA٠٣-CM	388	424 ˘ 130 ˘ 52	416)١L(˘١١١)١W(˘١١)١D(	416)١L(˘١١١)١W(˘)١D(

(2)Power and CM-03NQH network switch

Model	Size
PS-9	٣٨٣ ˘ ١٨١ ˘ mm٧١
CM-03NZH(1/2)	٣٨٣ ˘ ١٨١ ˘ mm٧١
CM-03NQH	240 ˘ 176 ˘ 71mm
PS-2	179 ˘ 189 ˘ 70mm
PS-5A-3	283 ˘ 189 ˘ 71mm

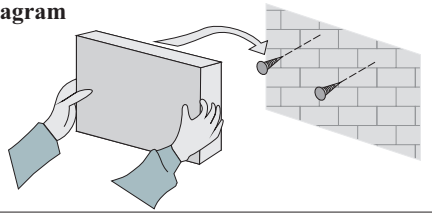
Installation size:



٢-PS ٣-A٥-PS NQH٠٣-CM

١-PS or ١/٢(NZH٠٣-CM(

Installation diagram



ˇPick up the handset of the ringing phone, you can talk with the calling indoor phone about 120sec. you can also talk with the door station (during this time, you can hear theˇbusy lineˇindication). When the calling indoor phone hangs up, the called indoor phone can talk with the door station.

ˇIf the system connects with a front door station, the operation is the same with the door station, the only difference is that you have to keep pressing the ˇUnlockˇbutton for more than 3 seconds, otherwise you cannot unlock for visitors.

(2)Surveillance on indoor phone

ˇPress the ˇMonitorˇbutton, you can monitor the door entry. After 15 seconds, it will be automatically shut down. If you want to quit the surveillance, just press the ˇMonitorˇ button again.

ˇIf the system connects with a front door station, you can monitor the two door entries circular order. If you want to monitor the main door entry, please press the ˇMonitorˇ button just one time. If you want to monitor the front door entry, please keep pressing the button more than 2 seconds.

ˇIf there are two or more indoor phones, the system allows only one to surveil the door entry at a time, and the other indoor phones ˇBusyˇ indicators will lights and cannot call each other during surveillance.

ˇDuring monitoring the door station, the main indoor phone can listen in the door station. PressˇCallˇbutton can talk with the door station and unlock the door.

(3)Broadcasting between the indoor phones

ˇPick up the handset, the indoor phone's ˇTalkˇ indicator will light, press the ˇCallˇ button for seconds and release, then broadcasting is begin, meanwhile other indoor phone's ˇbusyˇindicators will flash, and the indoor phones give ring. The broadcasting time is 30 seconds.

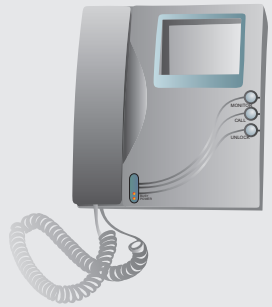
ˇOther hosts can pick up the handsets to answer when they receive the broadcasting. The conversation time is 120 seconds. During the period, the other indoor phones which handsets are not pick up stop ringing automatically, but theirˇBusyˇin dicators keep lighting. When the broadcasting or conversation time is up, the system will be shut down automatically.

ˇDuring intercommucating, if somebody call the door station, the system will switch directly to the talking between the door station and the indoor phone.

(4)Call the management unit from main indoor phone: pick up the main indoor phone's handset, press the ˇManagementˇbutton, the management unit rings (you can hear the echo). If nobody answers, the system will be automatically shut down after 30 seconds. **(Remarks: extra indoor phones do not have this function, but the main indoor phone can connect the line to extra indoor phones).**

(5)Main indoor phone alarm: Do not pick up the handset, just press the ˇManagementˇ button, the management unit can receive the alarm message. **(Remarks: this function is only available for the main indoor phone).**

5. CM-02NLRG/CM-02NLRG-C Indoor Phone



a)Working Voltage:18V DCˇ10%

b)Standby Current:ˇ15mA

c)Working Current:ˇ50mA٠

d)Kinescope:٤' flat tube(B/W)ŁResolution>450 linesŁ

e)Color Display:٤' color LCD displayŁ
Resolution:480ˇ250 pointsŁ

f)Environment Temperature:-10ˇ+55ˇŁ

g)Humidity:45%ˇ95%Ł

6. C Indoor Phone-NLRH٠٢-CM/NLRH٠٢-CM

a)Working Voltage:18V DCˇ10%

b)Standby Current:ˇ15mA

c)Working Current:ˇ500mA

d)Kinescope:4' flat tube(B/W)ŁResolution>450 linesŁ

e)Color Display:4' color LCD displayŁ
Resolution:480ˇ250 pointsŁ

f)Environment Temperature:-10ˇ+55ˇŁ

g)Humidity:45%ˇ95%Ł

7. C Indoor Phone-NLRM٠٢-CM/NLRM٠٢-CM

a)Working Voltage:18V DCˇ10%

b)Standby Current:ˇ15mA

c)Working Current:ˇ500mA

d)Kinescope:4' flat tube(B/W)ŁResolution>450 linesŁ

e)Color Display:4' color LCD displayŁ
Resolution:480ˇ250 pointsŁ

f)Environment Temperature:-10ˇ+55ˇŁ

g)Humidity:45%ˇ95%Ł

8. C Main Indoor Phone-NLRaM٠٢-CM/NLRaM٠٢-CM

a)Working Voltage:18V DC˘10%

B)Standby Current:˘90mA

c)Working Current:˘83mA٠

d)Kinescope:4' flat tube(B/W)ŁResolution>450 linesŁ

e)Color Display:4' color LCD displayŁ

Resolution:480˘250 pointsŁ

f)Environment Temperature:-10˘+55˘Ł

g)Humidity:45%˘95%Ł

9. C Extra Indoor Phone-NLRbM٠٢-CM/NLRbM٠٢-CM

a)Working Voltage:18V DC˘10%

b)Standby Current:˘90mA

c)Working Current:˘830mA

d)Kinescope:4' flat tube(B/W)ŁResolution>450 linesŁ

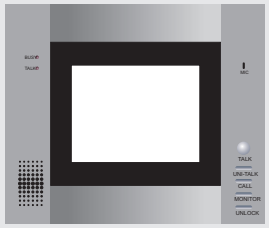
e)Color Display:4' color LCD displayŁ

Resolution:480˘250 points;

f)Environment Temperature:-10˘+55˘Ł

g)Humidity:45%˘95%Ł

10.Free Indoor Phone-NLRI Hands٠٢-CM



a)Working Voltage:18V DC˘10%

b)StandbyCurrent:˘15mA

c)Working Current:˘50mA٠

d)Color Display:4' or 5.6' color LCD displayŁ

Resolution:٤8٠˘250 points

e)Environment Temperature:-10˘+55˘Ł

f)Humidity:45%˘95%Ł

(3)Door station call indoor phone in the same building: press˘*˘and input the room No. that's all. For example: If you want to call NO. 102 family, when room number is three digits: press Room No. ˘102˘; When room number is four digits, press Room No. ˘0102˘If the Room No. is right, the indoor phone will ring, the host can pick up the handset(if for handfree indoor phone, press button ˘TALK˘) to talk with the visitor. And the conversation time limit is 120 seconds. When time is up, the door station will switch off automatically, if you want to continue talking, please call again. If nobody answer the indoor phone, the door station (with ring) begin to count down 30 seconds and after 30 seconds', the door station will shut down automatically. If you input the wrong room number, the door station will display˘Err˘and shut down automatically.

Note: The following functions only comes into effect when in the network system.

(4)Calling from door station to management unit: just press the ˘Management Unit No.˘ on the door station, for example, if you want to call No.01 Management Unit, just press ˘* + 01+#˘,***(if the room number is just 2 digital, you just need dial ˘*+#+01˘ to call management unit by door station)***, the Management Unit will ring, person in charge of the Management Unit can answer the phone, the conversation time limit is 120 seconds. If nobody answers the phone or the line is busy, the management unit will quit in 30 seconds. The management unit can unlock the door for the ˘Called˘door station.

(5)Indoor phone calls management unit: pick up the handsetof the indoor phone (if for handfree indoor phone, press button ˘TALK˘) and press ˘ ˘or˘CALL˘button, the management unit will ring, person in charge of the management unit can answer the phone. If nobody answers the phone or the line is busy, the management unit will quit in 30 seconds.

(6)Indoor phone call for help: press˘ ˘or˘CALL˘button, the management unit will receive the help massage.

Note: when debugging, if there are more than one same room numbers in one system, you can not call the indoor phone.

3.CM-02NLRaM/02NLRbM Video indoor phone operation

(1)Call from door station:

˘Press the room number button on the door station, all of the indoor phones in the room ring, meanwhile the screens display the visitor's image, and the˘Busy˘indicators flash. If nobody answers, the system will be automatically shut down after 30 seconds.

˘Pick up the handset and talk with the visitor (at the moment, the ˘Talk˘indicator lights).The other indoor phones will be shut down and the ˘Busy˘indicators will keep lighting. During the conversation, press the ˘Unlock˘button, you can unlock for the visitor.

˘If you want to connect the line to another indoor phone when you are talking with the visitor, just press the ˘Call˘button, then the other indoor phones will ring, meanwhile the door station gives voice.

(4)Monitor function: press the˘Monitor˘button in the indoor phone, you can see the condition outside door for 15 seconds. If you want to cancel the monitor, just press the ˘Monitor˘button again. (Note: If somebody calls another indoor phone at this time, the monitor function will be off.)

Note: The following functions only comes into effect when in the network system.

(5)Calling from door station to management unit: just press the ˘Management Unit No.˘ on the door station, for example, if you want to call No.01 Management Unit, just press ˘* + 01+#˘,***(if the room number is just 2 digital, you just need dial ˘*+#+01˘ to call management unit by door station),*** the Management Unit will ring, person in charge of the Management Unit can answer the phone, the conversation time limit is 120 seconds. If nobody answers the phone or the line is busy, the management unit will quit in 30 seconds. The management unit can unlock the door for the ˘Called˘door station.

(6)Indoor phone calls management unit: pick up the handset, press ˘Call˘button, the management unit will ring, person in charge of the management unit can answer the phone. If nobody answers the phone or the line is busy, the management unit will quit in 30 seconds.

(7)Indoor phone call for help: press˘Call˘button, the management unit will receive the help massage.

Note: when debugging, if there are more than one same room numbers in one system, you can not call the indoor phone.

2.Audio system operation:

(1)Password to unlock the door station: Press ˘*+ F4˘, the door station will display ˘Addr˘, enter the room No.(3-digit or 4-digit), If the door station displays˘Pd-p˘, Please enter password (the default password is 1234), Then the door station displays ˘Pass˘ indicates successful unlock. If enter the wrong room number, the door station will display˘'Err˘and shut down automatically. If you enter the wrong unlock password, the door station will display˘Pd-p˘. If you enter wrong unlock password more than five times at the same time, the door station will shut down automatically.

(Note: when the system operate in a network if users key a wrong password more than 5 times at one time. then the door station will give an alarm to the management unit automatically

(2)Change unlock password: Press˘*+ 3 + F3˘, the door station displays˘Addr˘, enter the room No. (3-digit or 4-digit), door station displays˘Pd-p˘, enter old unlock password, then door station displays˘Pd-n˘, please enter new password, If the door station displays˘Pass˘, which indicates the unlock password successful change. If you enter the wrong room NO and password, the door station will display˘Err˘and shut down automatically.

11. Free Indoor Phone-NLRJ Hands٠٢-CM

a)Working Voltage:18V DC˘10%

b)Standby Current:˘15mA

c)Working Current˘٥0mA٠

d)Color Display:4' or 5.6'color LCD displayŁ

Resolution:٤8٠˘250 points

e)Environment Temperature:-10˘+55˘Ł

f)Humidity:45%˘95%Ł

12. Free Indoor Phone-C Hands-NLRV٠٢-CM/NLRV٠٢-CM

a)Working Voltage:18V DC˘10%

b)Standby Current:˘15mA

c)Working Current˘500mA

d)Kinescope:4' flat tube(black/white)Ł

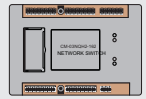
e)Color Display:4' color LCD displayŁ

Resolution:480˘250 points

f)Environment Temperature:-10˘+55˘Ł

g)Humidity:45%˘95%Ł

13. Network Switch For Video System



CM-03NQH2-162

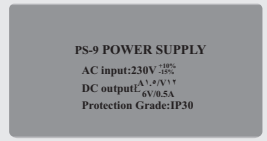
CM-03NQH

a)Working Voltage:18V DC˘10%

b)Standby Current:˘mA٥٠

c)Working Current˘mA٥٠٠

14. PS-9 Power(UPS)



a)AC Input Voltage: ˘٢3V٠ AC$^{+10\%}_{-15\%}$

b)DC Output Voltage: A١.٥/V١٢
A٠.٥/V٦

15. CM-03NZH Conformity Unit(4 route way)

a)Working Voltage: V DC١٢˘١٠١
V DC٦˘١٠١

b)Standby Current:˘85mA

c)Working Current:˘500mA

16. CM-03NHMC Management Unit

a)Working Voltage:18V DC˘10%

b)Standby Current:˘120mA

c)Working Current:˘800mA

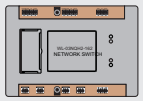
17. CM-03NWD(A) Wall Phone

a)Working Voltage:18V DC˘10%

b)Standby Current:˘75mA

c)Working Current:˘350mA

18. Network Switch For Audio system



WL-03NQH2-162

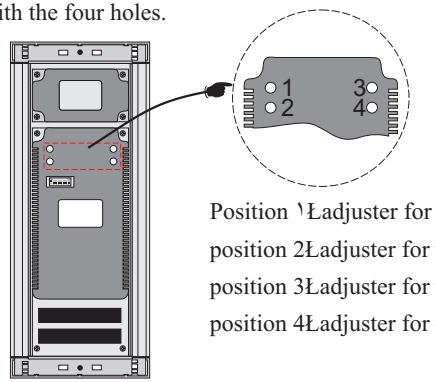
WL-03NQH

a)Working Voltage:12V DC˘10%

b)Standby Current:˘٥5mA

c)Working Current:˘1mA٠٠

3.How to adjust the tonesŁUncover the door station.) (Ł
tone with the four holes.



Position ١Ładjuster for the door station speech volume
position 2Ładjuster for the indoor phone ring volume
position 3Ładjuster for the indoor phone speech volume
position 4Ładjuster for the door station feed-back ring volume

The back cover of the door station

11˘System operation

١.Video system operation：

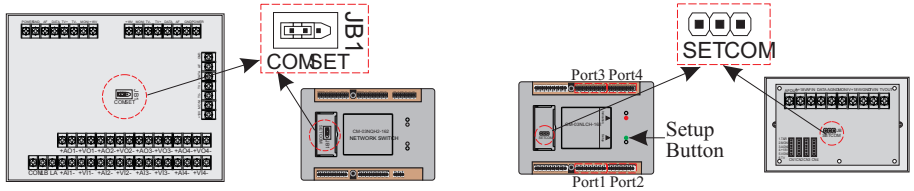
(1)Password to unlock the door station: Press ˘*+ F4˘, the door station will display ˘Addr˘, input the room No.(3-digit or 4-digit), If the door station displays˘Pd-p˘, Please input password (the initialization passord is 1234), Then the door station displays ˘Pass˘ indicates successful unlock. If input the wrong room number, the door station will display˘'Err˘and shut down automatically. If you input the wrong unlock password, the door station will display˘Pd-p˘. If you input wrong unlock password more than five times at the same time, the door station will shut down automatically.

(Note: when the system operate in a network if users key a wrong password more than 5 times at one time. then the door station will give an alarm to the management unit automatically

(2)Change unlock password: Put the ˘Jb1˘in the module to the ˘SET˘position press ˘*+ 3 + F3˘, the door station displays˘Addr˘, input the room No. (3-digit or 4-digit), door station displays˘Pd-p˘, input old unlock password, then door station displays ˘Pd-n˘, please input new password, If the door station displays˘Pass˘, which indicates the unlock password successful change. If you input the wrong room NO and password, the door station will display˘Err˘and shut down automatically. When finished the setting, put the ˘JB1˘in the module to the ˘COM˘position.

) **(Door station call indoor phone in the same building:** press˘*˘and input the room No. that's all. For example: If you want to call NO. 102 family, when room number is three digits: press Room No. ˘102˘; When room number is four digits, press Room No. ˘0102˘If the Room No. is right, the indoor phone will ring, the host can pick up the handset to talk with the visitor. And the conversation time limit is 120 seconds. When time is up, the door station will switch off automatically, if you want to continue talking, please call again. If nobody answer the indoor phone, the door station (with ring) begin to count down 30 seconds and after 30 seconds', the door station will shut down automatically. If you input the wrong room number, the door station will display ˘Err˘and shut down automatically.

10˘System setting(video/audio system are same)



CM-03NQH inside view CM-03NQH2-162 CM-03NLCH2-162 CM-03NLCH

1.Set door station No.: Put the ˘JB1˘in the network switch to ˘SET˘ position. Press ˘* +1+ F3˘, the door station shows ˘Addr˘, input door station No., You can hear a suggestive sound of ˘du˘, it means the setting is ok. When finish setting, put the ˘JB1˘ in the network switch to ˘COM˘position. Commonly the door station No. is 4- digit number, If the number with letters , One letter is equal to two digits, such as 0008, 02B. **(Note: This only need to set when in network system, and its function only become effective in the NETWORK system).**

2.Set Room No.: uncover the module, put the module's pin cap at ˘SET˘ position then lightly poke the˘SETUP˘hole on the surface of module with a ball pen, the module's indicator flickers quickly, the door station will display˘Addr˘,type 3-digit or 4-digit room No. on the door station , (the Room No. is decided by the door station) and the door station will display˘Port˘, then enter one module terminal number(one digit number from 1-4), if door station displays ˘Addr˘again, that indicates the room No. has been set, you can continue to type the next room No., If door station displays˘Err˘and then ˘Addr˘, that means you failed to set the room NO., re-enter again. When finished room number setting, press ˘SET˘ button on the module, if the indicate light is flickering slower, then you can quit the setting. Put the pin cap to the ˘COM˘ position to avoid the losing of the room number. **(Please note: one module can set 4 room numbers at most, all initialization unlock passwords are 1234.)**

For example: If set Room No. 101, operate as below, Press ˘SET˘button on the surface of the module which the indoor phone 101 connects to, the indicator will flicker quickly, the door station will display ˘Addr˘Input 0101; the door station will display ˘Port˘Input Port No.˘1˘which the indoor phone connects to accordingly, the door station will display ˘1˘first then ˘Addr˘, this means setting successfully. Press ˘SET˘ button, the indicate light is flickering slower, which means you are quitting the setting.

Note: when set user number in the module, connect one module with door station, set room numbers follows above, after finishing, take away the IC memory (U3, it is used to memorize the set room info) and mark it (the port and its number). Then insert another IC memory to this module and follow above instruction one by one until you finish all room number. Then insert the set IC memory into modules of the corresponding floors. It is the most efficient way to set room number.

19. Audio Indoor Phone

WL-02NLFD WL-02NLFH

a)Working Voltage:DC12V˘10%

b)Static Current:0

c)Working Current:˘2mA٠

WL-02NLFC WL-02NLFH1

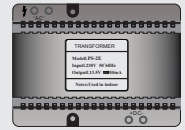
20. WL-02NLFL Audio Indoor Phone

a)Working Voltage:DC12V˘10%

b)Static Current:˘20mA

c)Working Current:˘6mA٠

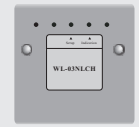
21. PS-2E Power



a)AC Input Voltage: ˘ ˘ ˘AC3V٠ +10% -15%

b)DC Output Voltage:١DC3.5V/800mA

22. WL-03NLCH Module



a)Working Voltage:DC12V˘10%

b)Static Current:˘8mA

c)Working Current:˘25mA

23. WL-03NZH Conformity Unit(4 routeway)

a)Working Voltage: V١٢DC˘١٠١ V٦DC˘١٠١

b)Static Current:˘85mA

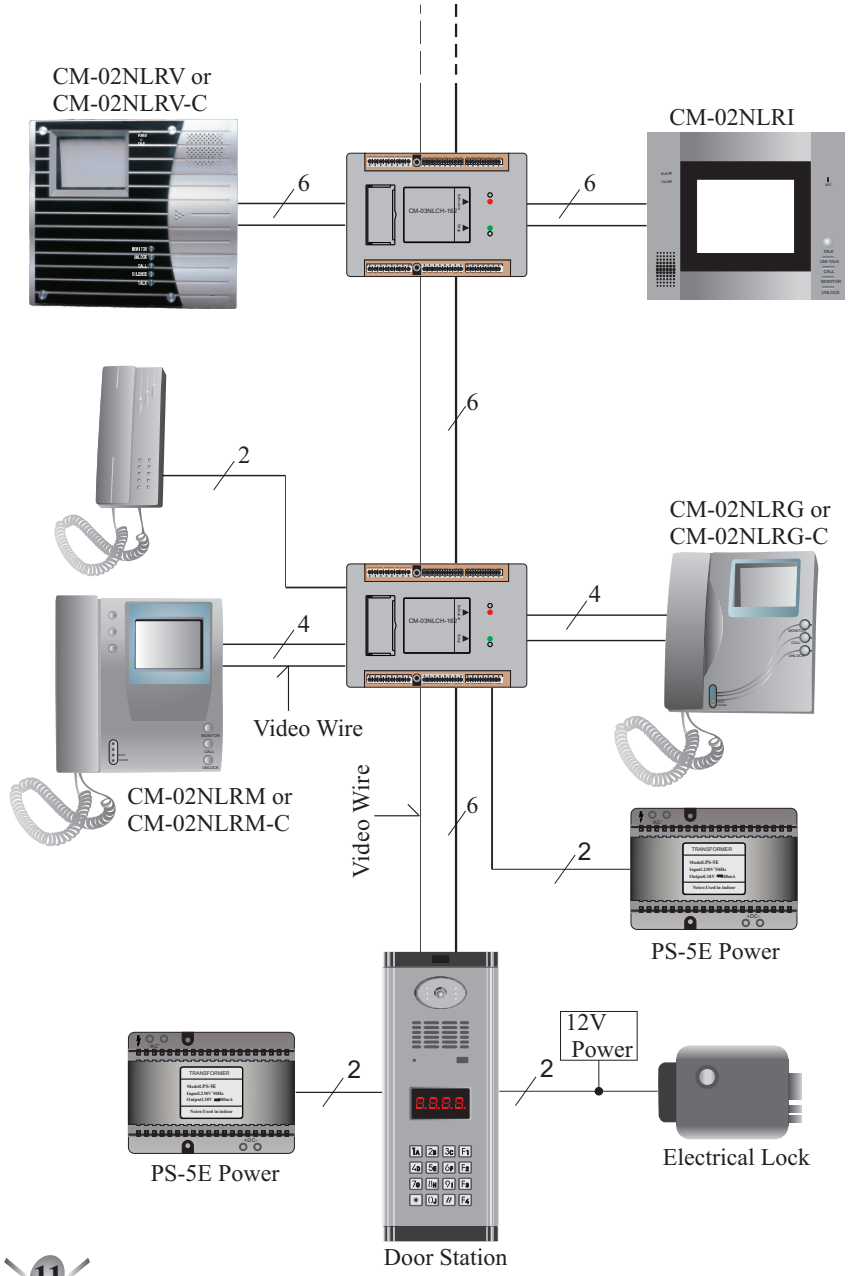
c)Working Current:˘400mA

Note: above ˘ ˘ ˘ partial explanation and input voltage, the voltage can be set according to different region countries.

6ˇSystem diagram

1.Non-Network system diagramŁ

(1)Non-Network video system diagramŁ



9ˇWiring Material

Model	Diagram		Wire material requirements(vertical square)		Remarks
Video system	Between door station and module		ˇ 30M	ˇ 100M	Note:(1)in this charts, RVVP represent the shield-wire (2)Actual wire depended on capacity of the project! When exceed the ordered distance, please enlarge the square accordingly (3)when network, if the total distance is exceed 200M, please add one video amplifier and repeaters. (4)the parameter in this chart is only for reference, our company reserve the right to change and explain.
			RVV6 ˇ 0.75mm^2	RVV6 ˇ 1.5mm^2	
			SYV75-5/96 PCS ˇ	SYV75-5/96 PCS ˇ	
	Between module and indoor phone	Hand-set indoor phone	ˇ 30M	ˇ 100M	
			RVV4 ˇ 0.5mm^2+SYV75-5/96	RVV4 ˇ 1.5mm^2+SYV75-5/96	
		Hand-free indoor phone	RVV6 ˇ 0.75mm^2+SYV75-5/96	RVV6 ˇ 1.5mm^2+SYV75-5/96	
	Between door station and power supply		ˇ 10M		
			RVV2 ˇ 1.0mm^2		
	Between door station and electrical lock		ˇ 10M		
			RVV2 ˇ 1.0mm^2		
	Among switch , door station and module		ˇ 100M	ˇ 200M	
			RVVP6 ˇ 0.75mm^2	RVVP6 ˇ 1.0mm^2	
			SYV75-5/96 PCS ˇ	SYV75-5/96 PCS ˇ	
	Between Conformity unit and management unit		ˇ 800M		
			RVVP5 ˇ 1.0mm^2		
			SYV75-7/128 PCS ˇ		
	Between Network switch and Conformity unit's BUS board		When 4 rout waysŁRVVP11ˇ1.0mm +4 video wires SYV75-7/128)three wires are data wire and eight wires are audio wire in the 11-core wire(When 3 rout waysŁRVVP9ˇ1.0mm +3 video wires SYV75-7/128)three wires are data wire and six wires are audio wire in the 9-core wire(When 2 rout waysŁRVVP7ˇ1.0mm +2 video wires SYV75-7/128(three wires are data wire and four wires are audio wire in the 7-core wire(When 1 rout waysŁRVVP5ˇ1.0mm +1 video wires SYV75-7/128)three wires are data wire and two wires are audio wire in the 5-core wire(		
Audio system	Between door station and module		ˇ 30M	ˇ 100M	
			RVV4 ˇ 0.5mm^2	RVV4 ˇ 1.0mm^2	
	Between module and indoor phone	Hand-set indoor phone	ˇ 30M	ˇ 100M	
			RVV2 ˇ 0.3mm^2	RVV2 ˇ 1.0mm^2	
		Hand-free indoor phone	RVV4 ˇ 0.3mm^2	RVV4 ˇ 1.0mm^2	
	Among switch , door station and module		ˇ 100M	ˇ 200M	
			RVVP4 ˇ 0.75mm^2	RVVP4 ˇ 1.0mm^2	
	Between conformity and management unit		ˇ 800M		
			RVVP5 ˇ 1.0mm^2		
	Between Network switch and Conformity unit's BUS board		When 4 rout waysŁRVVP11ˇ1.0mm shield wire(three wires are data wire and eight wires are audio wire in the 11-core wire) When 3 rout waysŁRVVP9ˇ1.0mm shield wire)three wires are data wire and six wires are audio wire in the 9-core wire(When 2 rout waysŁRVVP7ˇ1.0mm shield wire)three wires are data wire and four wires are audio wire in the 7-core wire(When 1 rout waysŁRVVP5ˇ1.0mm shield wire)three wires are data wire and two wires are audio wire in the 5-core wire(		

(2)Wiring between switches and among switch, door station, module, and conformity unit:

ˇWiring among switches:

Network Switch	Data A	Data B	Common terminal	Audio input for No.1 route way	Audio GND input for No.1 route way	Audio input for No.2 route way	Audio GND input for No.2 route way	•••
	LA	LB	COM	AI1+	AI1-	AI2+	AI2-	•••
	↕	↕	↕	↕	↕	↕	↕	↕
Network Switch	Data A	Data B	Common terminal	Audio output for No.1 route way	Audio GND output for No.1 route way	Audio output for No.2 route way	Audio GND output for No.2 route way	•••
	LA	LB	COM	AO1+	AO1-	AO2+	AO2-	•••

ˇWiring between switch and door station, module:

Door Station	Audio power	Audio	Data	Audio GND
	POWER	AF	DATA	GND
	↕	↕	↕	↕
Network Switch	Audio power	Audio	Data	Audio GND
	POWER	AF	DATA	GND
	↕	↕	↕	↕
Module	Audio power	Audio	Data	Audio GND
	VCC	AF	DATA	GND

ˇWiring between switch and extra door station:

Extra Door Station	Audio	Data	Audio GND
	AF	DATA	GND
	↕	↕	↕
Network Switch	Audio	Data	Audio GND
	AF	DATA	GND

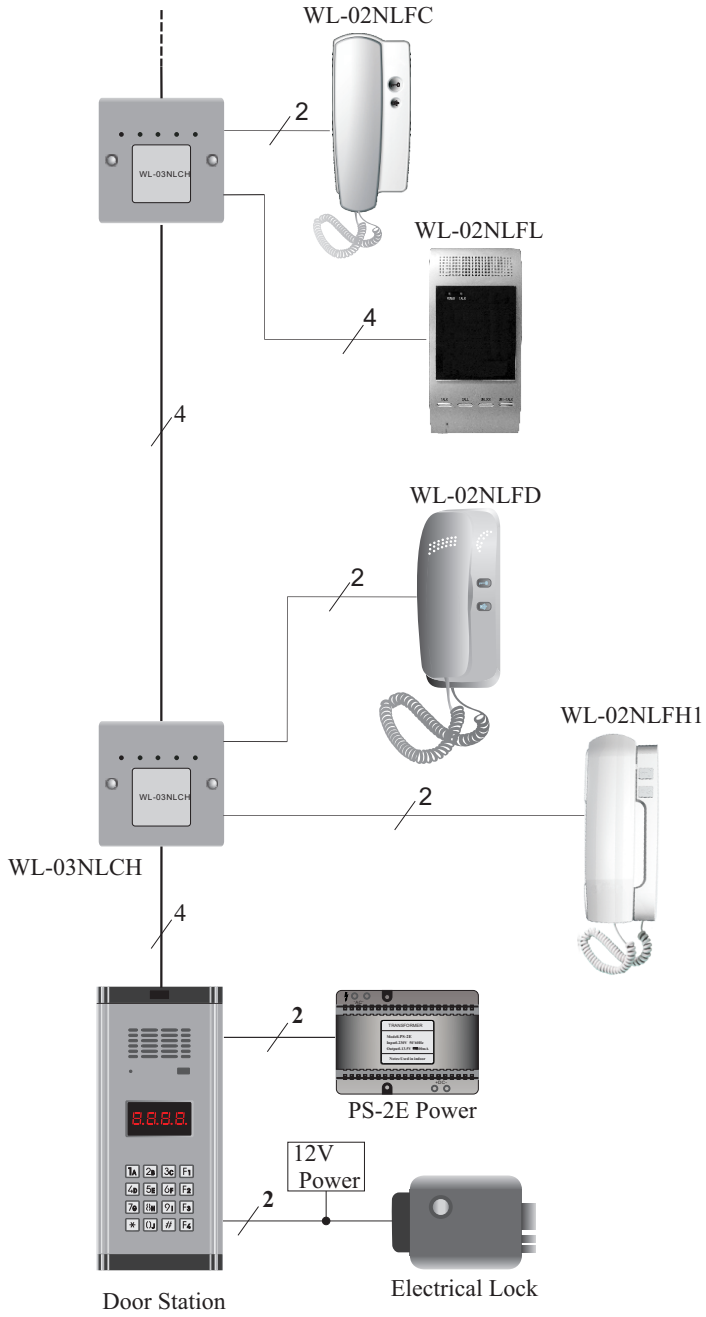
ˇWiring between switch and conformity unit (BUS board):

Network Switch	Data A	Data B	Common terminal	Audio input for No.1 route way	Audio GND input for No.1 route way	Audio input for No.2 route way	Audio GND input for No.2 route way	•••
	LA	LB	COM	AI1+	AI1-	AI2+	AI2-	•••
	↕	↕	↕	↕	↕	↕	↕	↕
Conformity unit's BUS board	Data A	Data B	Common terminal	Audio for No.1 route way	Audio GND for No.1 route way	Audio for No.2 route way	Audio GND for No.2 route way	•••
	LA	LB	COM	AF1+	AF1-	AF2+	AF2-	•••

(3)Wiring between conformity unit's PORT board and management unit:

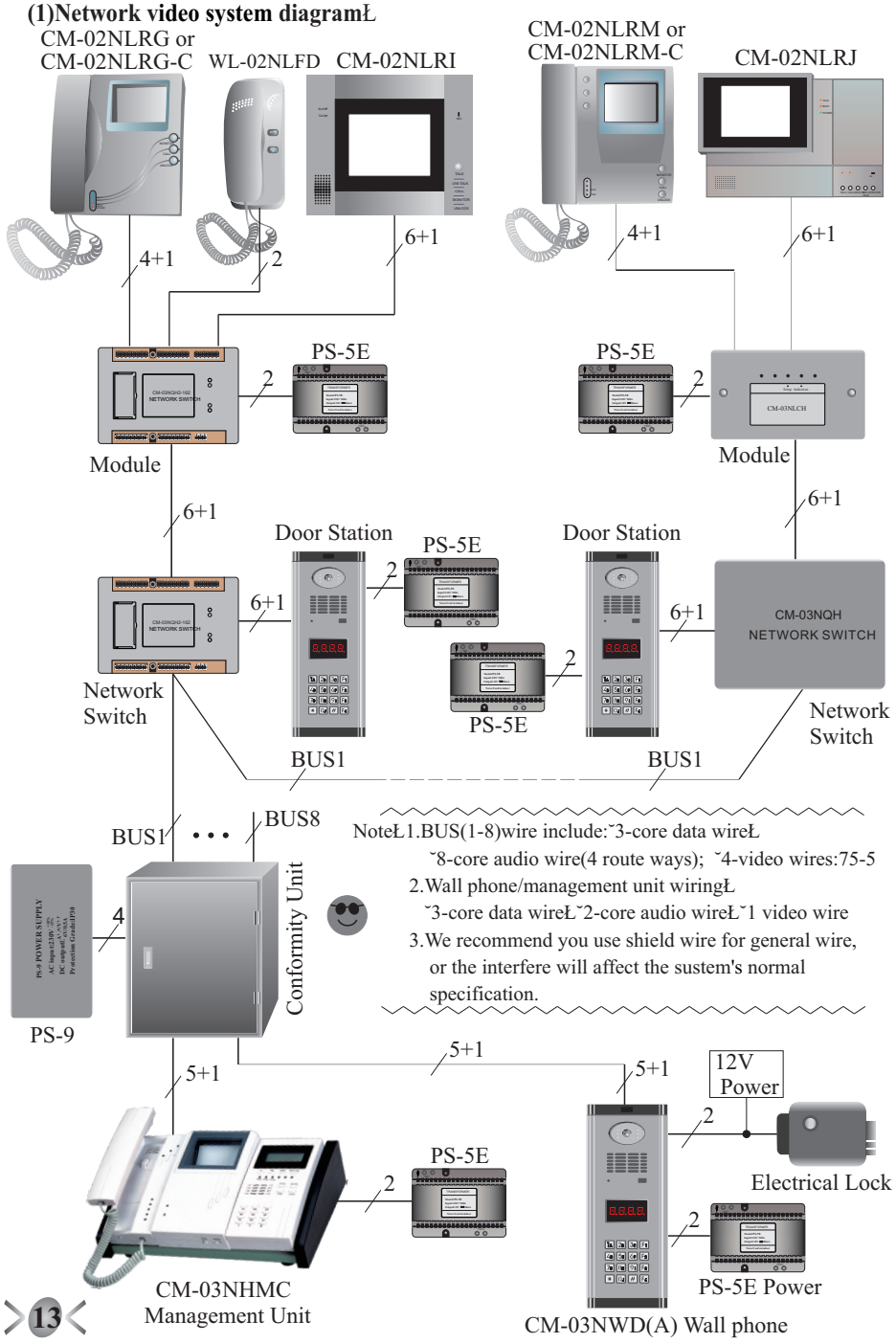
Conformity unit's PORT board	Data A	Data B	Common terminal	Audio	Audio GND
	LA	LB	COM	AF+	AF-
	↕	↕	↕	↕	↕
Management unit'switch box	Data A	Data B	Common terminal	Audio	Audio GND
	OR	BK	BL	GR	YL

(2)Non-Network audio system diagramŁ



2.Network system diagram

(1)Network video system diagramŁ



NoteŁ1.BUS(1-8)wire include:˘3-core data wireŁ
˘8-core audio wire(4 route ways); ˘4-video wires:75-5
2.Wall phone/management unit wiringŁ
˘3-core data wireŁ˘2-core audio wireŁ˘1 video wire
3.We recommend you use shield wire for general wire,
or the interfere will affect the sustem's normal
specification.

˘**Wiring among network switches:**

Network Switch	Data A	Data B	Common terminal	Audio input for No.1 route way	Audio GND input for No.1 route way	Video input for No.1 route way	Video GND input for No.1 route way	•••
	LA	LB	COM	AI1+	AI1-	VI1+	VI1-	•••
	↕	↕	↕	↕	↕	↕	↕	↕
Network Switch	Data A	Data B	Common terminal	Audio output for No.1 route way	Audio GND output for No.1 route way	Video output for No.1 route way	Video GND output for No.1 route way	•••
	LA	LB	COM	AO1+	AO1-	VO1+	VO1-	•••

˘**Wiring between switch and conformity unit (BUS board):**

Network Switch	Data A	Data B	Common terminal	Audio input for No.1 route way	Audio GND input for No.1 route way	Video input for No.1 route way	Video GND input for No.1 route way	•••
	LA	LB	COM	AI1+	AI1-	VI1+	VI1-	•••
	↕	↕	↕	↕	↕	↕	↕	↕
Conformity unit's BUS board	Data A	Data B	Common terminal	Audio for No.1 route way	Audio GND for No.1 route way	Video for No.1 route way	Video GND for No.1 route way	•••
	LA	LB	COM	AF1+	AF1-	TV1+	TV1-	•••

(5)Wiring between conformity unit's PORT board and management unit:

Conformity unit's port board	Data A	Data B	Common terminal	Audio	Audio GND	Video	Video GND
	LA	LB	COM	AF+	AF-	TV+	TV-
	↕	↕	↕	↕	↕	↕	↕
Management unit'switch box	Data A	Data B	Common terminal	Audio	Audio GND	**Management unit's video port**	
	OR	BK	BL	GR	YL		

2.Audio system:

(1)Wiring between door station and moduleŁ

Door Station	Audio power	Audio	Data	Audio GND
	POWER	AF	DATA	AGND
	↕	↕	↕	↕
Module	Audio power	Audio	Data	Audio GND
	VCC	AF	DATA	GND

(2)Wiring between module and WL-02NLFL indoor phoneŁ

Module	Audio power	Audio GND	Audio	Audio cortrol GND
	VCC	GND	T&R	G1-G4
	↕	↕	↕	↕
Indoor phone	Audio power	Audio GND	Audio	Audio cortrol GND
	+12V	GND	T&R	AGND

˘ Wiring instruction from module to indoor phone CM-02NLRV/CM-02NLRI/CM-02NLRJŁ

Module	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Audio Power	Audio GND
	T&R	MONI	AGND	V+18V	VGND	TV	A+18V	GND
	↕	↕	↕	↕	↕	↕	↕	↕
Indoor Phone	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Audio Power	Audio GND
	T&R	MONI	AGND	V+18V	VGND	TV	A+18V	GND

˘ Video system-- Wiring from module to audio indoor phoneŁ

Module	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Audio Power	Audio GND
	T&R	MONI	AGND	V+18V	VGND	TV	A+18V	GND
	↕	↕	↕	↕	↕	↕	↕	↕
Indoor Phone	1 (T&R)		2 (AGND)	Two wires from indoor phone, non polarity			+12V	GND
							For WL-02NLFL	

Note:WL-02NLFL indoor phones have to use four-cord cables (T&R/AGND/V+12V /GND) while the other indoor phones use two-cord cables(T&R/AGND).

(4)Wiring between switches and among switch, door station, and conformity unit:

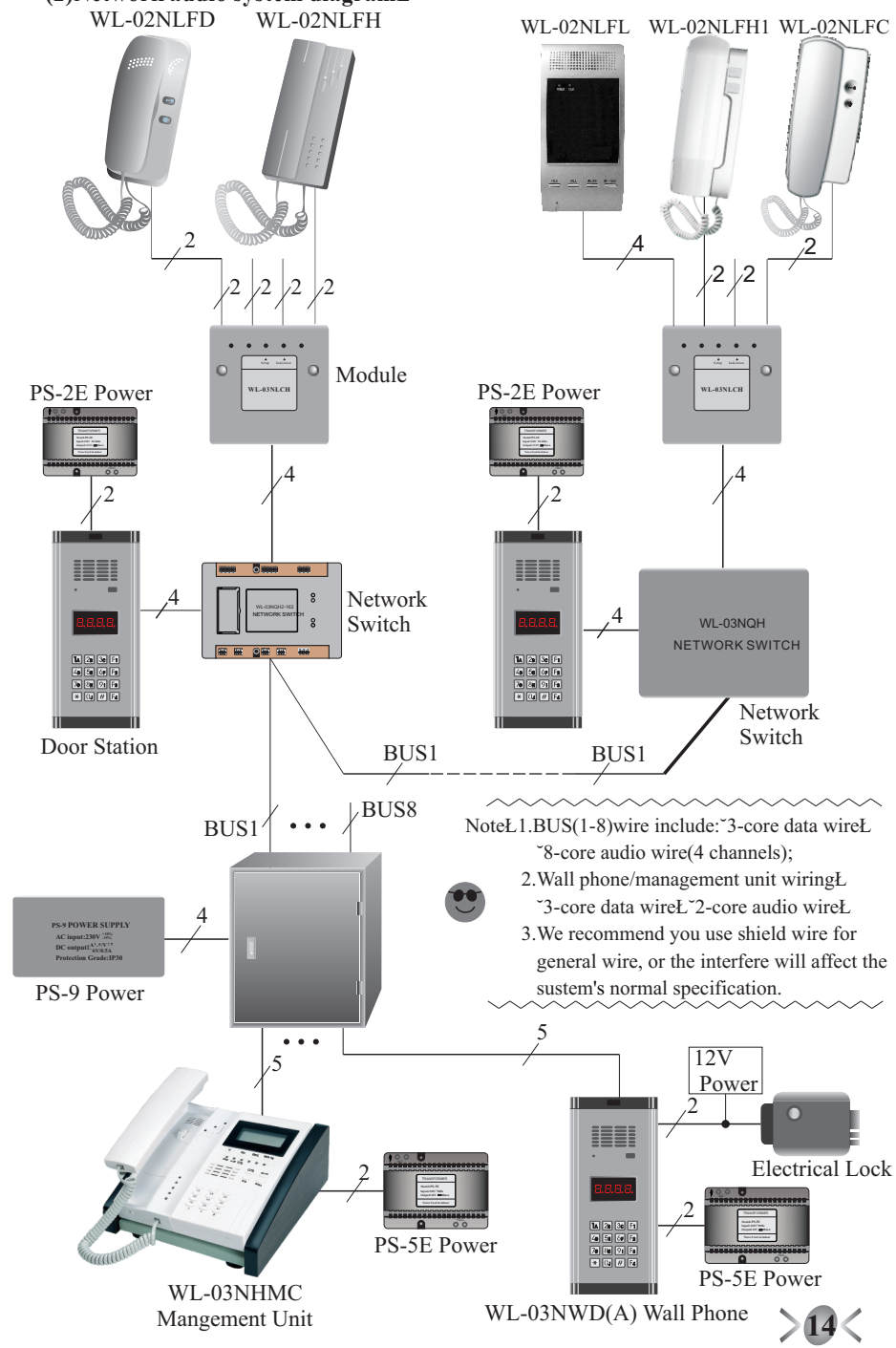
˘Wiring between switch and door station, module:

Door Station	Audio Power	Audio	Data	Audio GND	Monitor	Video Power	Video GND	Video
	POWER	AF	DATA	AGND	MONI	+18V	TV-	TV+
	↕	↕	↕	↕	↕	↕	↕	↕
Network Switch	Audio Power	Audio	Data	Audio GND	Monitor	Video Power	Video GND	Video
	POWER	AF	DATA	GND	MONI	+18V	TV-	TV+
	↕	↕	↕	↕	↕	↕	↕	↕
Module	Audio Power	Audio	Data	Audio GND	Monitor	Video Power	Video GND	Video
	A+18V	AFIN	DATA	AGND	MONI	V+18V	VGND	TVIN

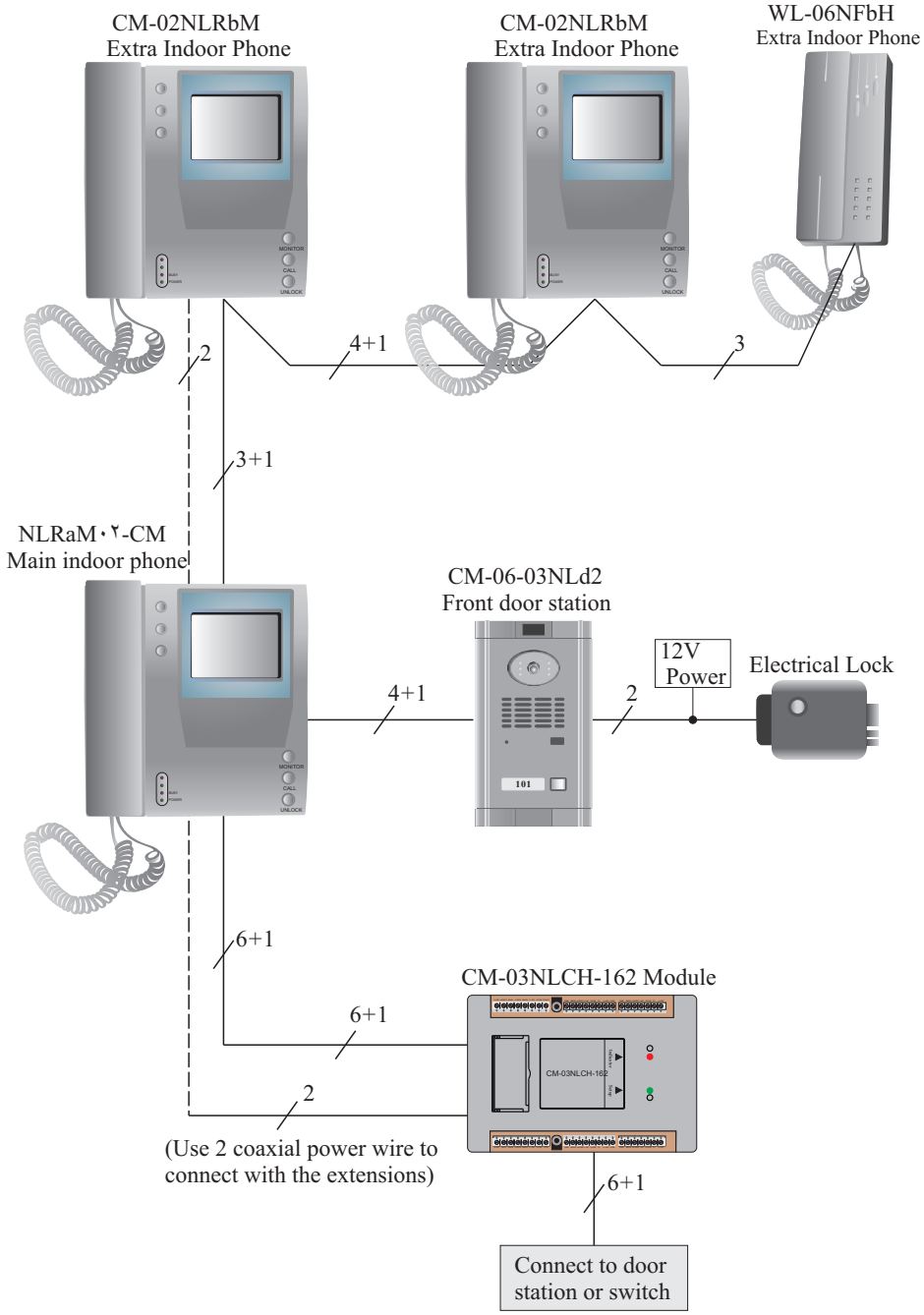
˘Wiring between switch and extra door station:

Extra Door Station	Audio Power	Audio	Data	Audio GND	Monitor	Video Power	Video GND	Video
	POWER	AF	DATA	AGND	MONI	+18V	TV-	TV+
	↕	↕	↕	↕	↕	↕	↕	↕
Network Switch	Enpty	Audio	Data	Audio GND	Enpty	Video Power	Video GND	Video
		AF	DATA	GND		+18V	TV-	TV+

(2)Network audio system diagramŁ



3.Diagram for main indoor phone CM-02NLRaMŁ



8˘Wiring Instruction

١.Wiring Instruction for video system

(1)Wiring Instruction among door station, power and lock:

Door Station	Audio power	Audio GND power		Electrical Lock	Electrical Lock
	POWER	GND		LK-	LK+
	↕	↕		↕	↕
PS-5E Power	Power+	Power-	Electrical Lock	Electrical Lock	Electrical Lock
	+	-			

(2)Wiring instruction from door station to moduleŁ

Door Station	Audio power	Audio	Data	Audio GND	Monitor	Video power	Video GND	Video
	POWER	AF	DATA	GND	MONI	+18V	TV-	TV+
	↕	↕	↕	↕	↕	↕	↕	↕
Module	Audio power	Audio	Data	Audio GND	Monitor	Video power	Video GND	Video
	A+18V	AFIN	DATA	AGND	MONI	V+18V	VGND	TVIN

(3)Wiring instruction from module to indoor phoneŁ

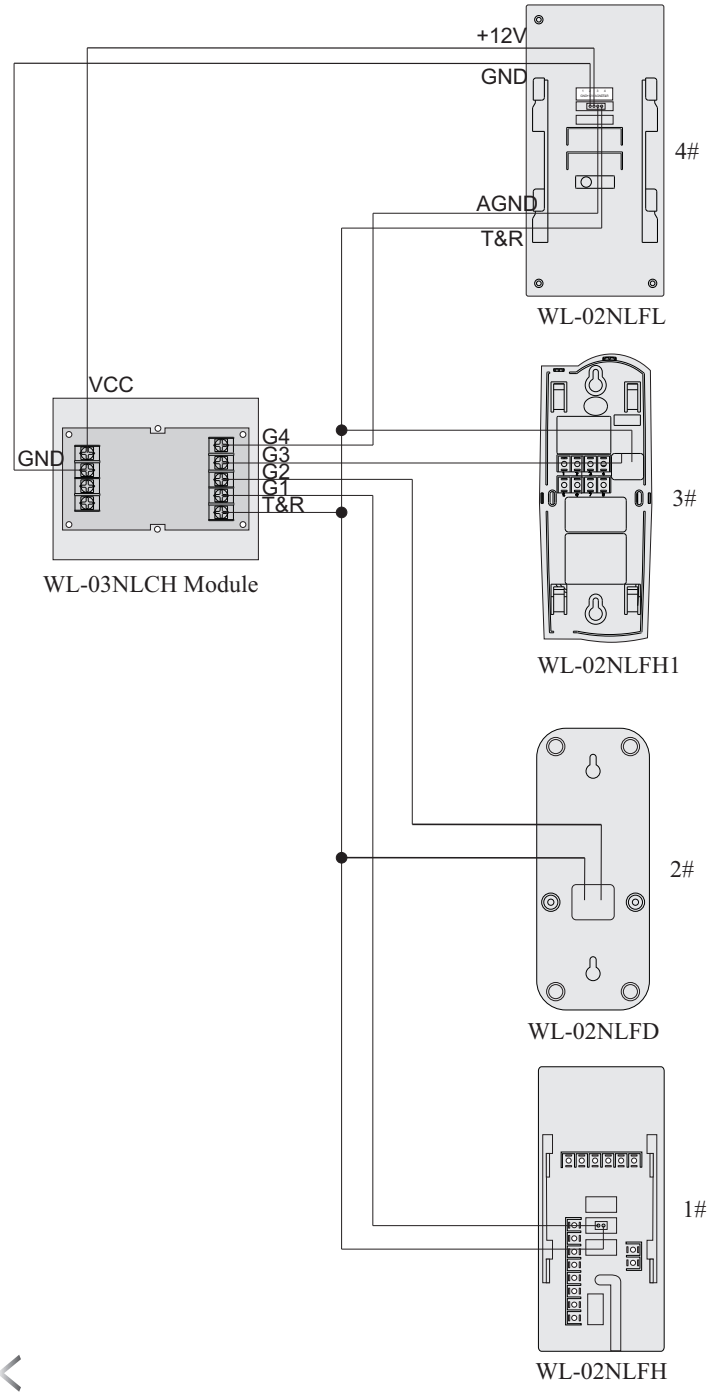
˘ **Wiring instruction from module to indoor phoneCM-02NLRGŁ**

Module	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Audio Power	Audio GND
	T&R	MONI	AGND	V+18V	VGND	TV	A+18V	GND
	↕	↕	↕	↕	↕	↕	↕	↕
Indoor Phone	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Empty	
	T&R	MONI	AGND	+18V	VGND	TV		
	1	2	3	4	5˘6	7		

˘ **Wiring instruction from module to indoor phone CM-02NLRH/CM-02NLRMŁ**

Module	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Audio Power	Audio GND
	T&R	MONI	AGND	V+18V	VGND	TV	A+18V	GND
	↕	↕	↕	↕	↕	↕	↕	↕
Indoor Phone	Audio	Monitor	Audio cortrol GND	Video Power	Video GND	Video	Empty	
	T&R	MONI	AGND	V+18V	VGND	TV		

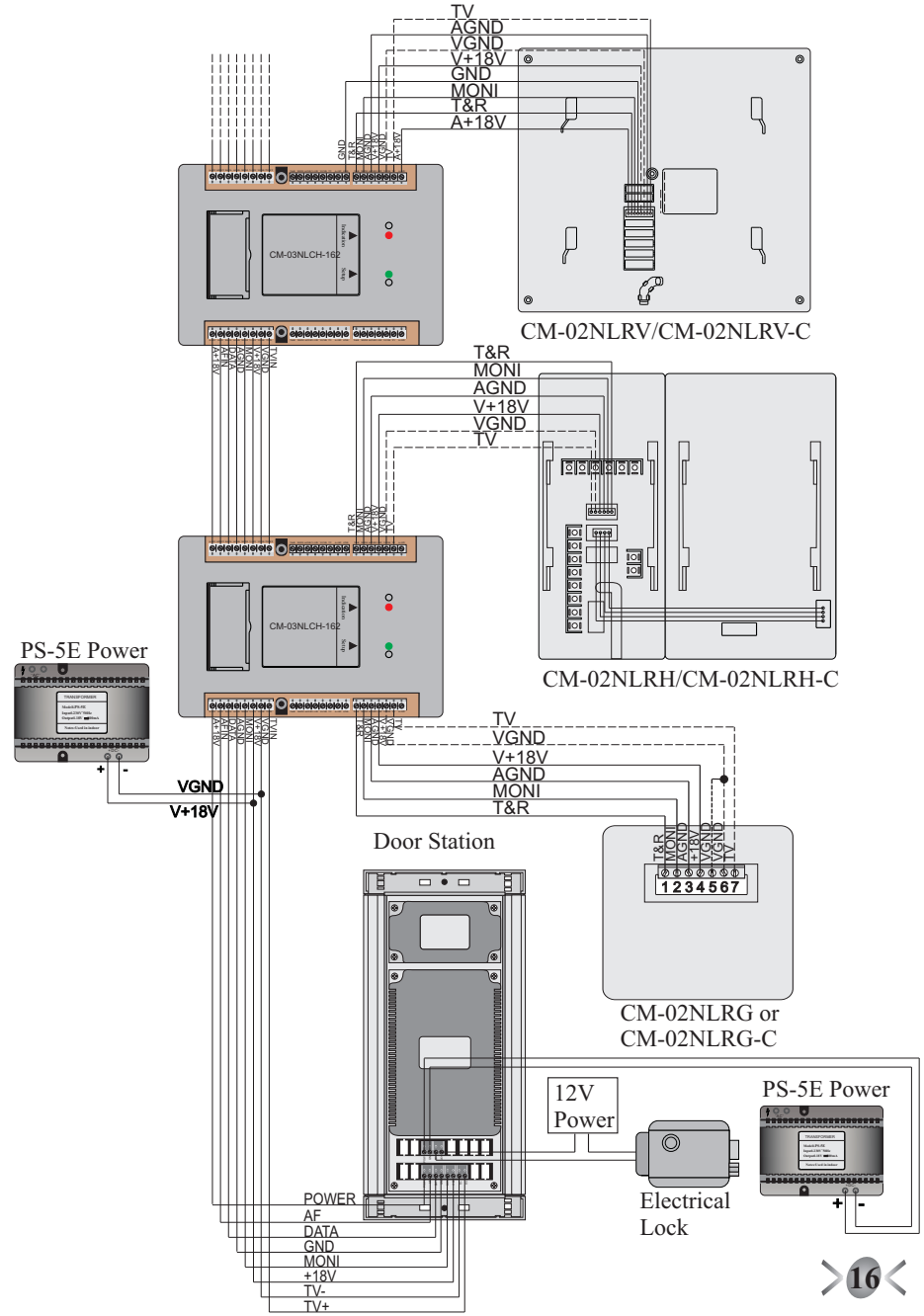
˜Wiring between module and indoor phoneŁ



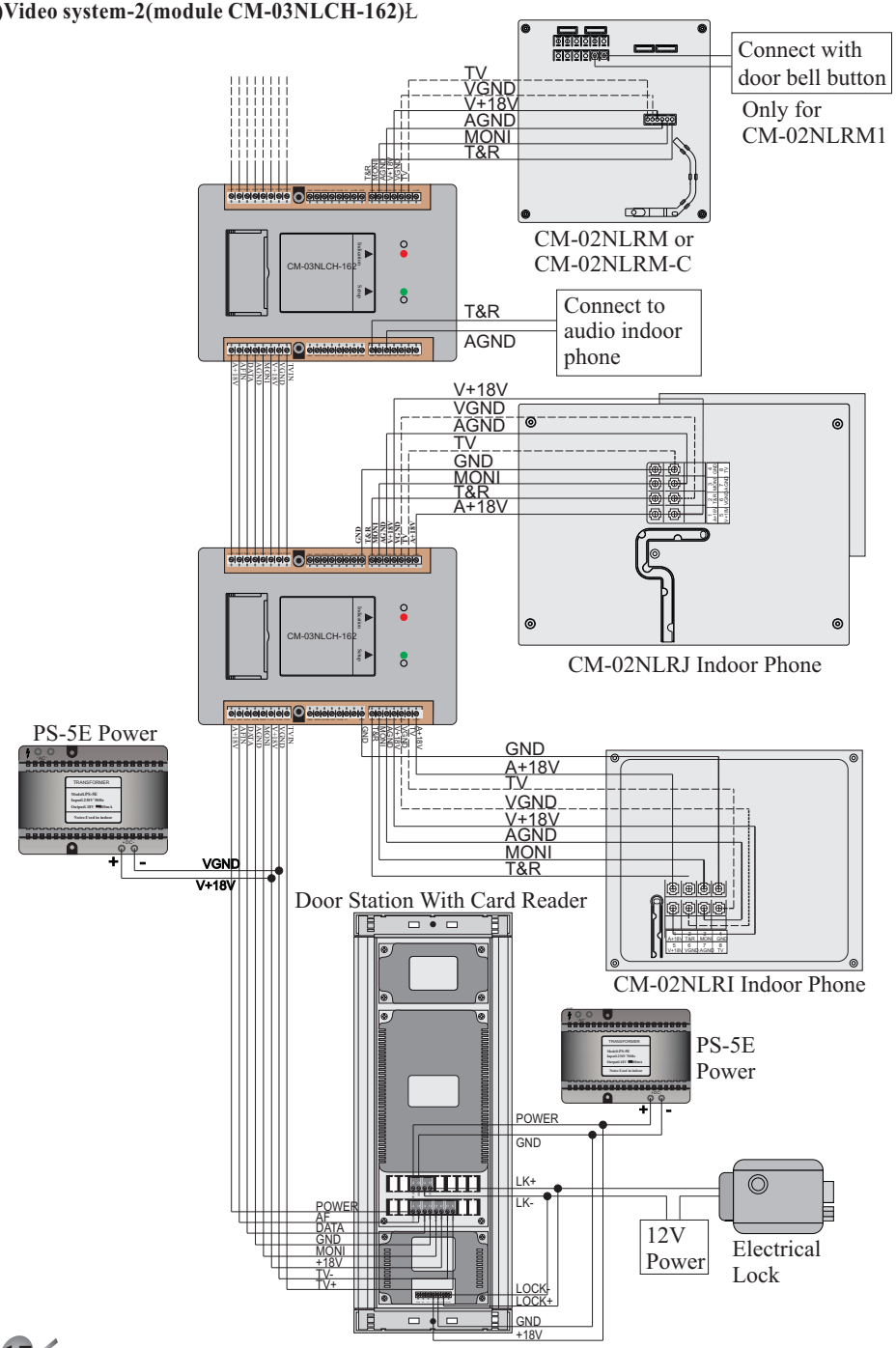
7˜System Wiring

1.Non network wiring for video system:

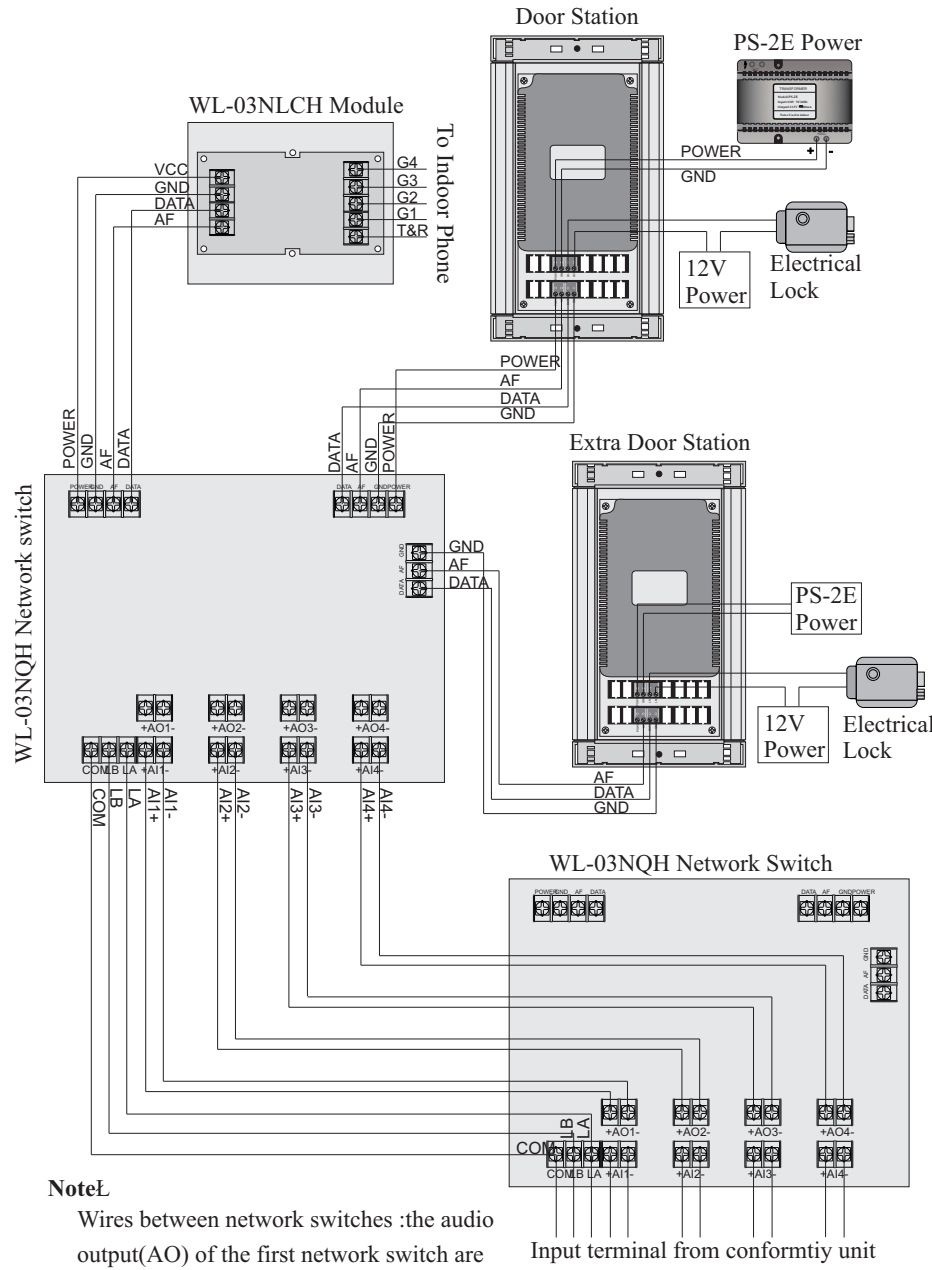
(1)Video system-1(module CM-03NLCH-162)Ł



(2)Video system-2(module CM-03NLCH-162)Ł



b)Wiring among WL-03NQH switch, WL-03NLCH module and door station:

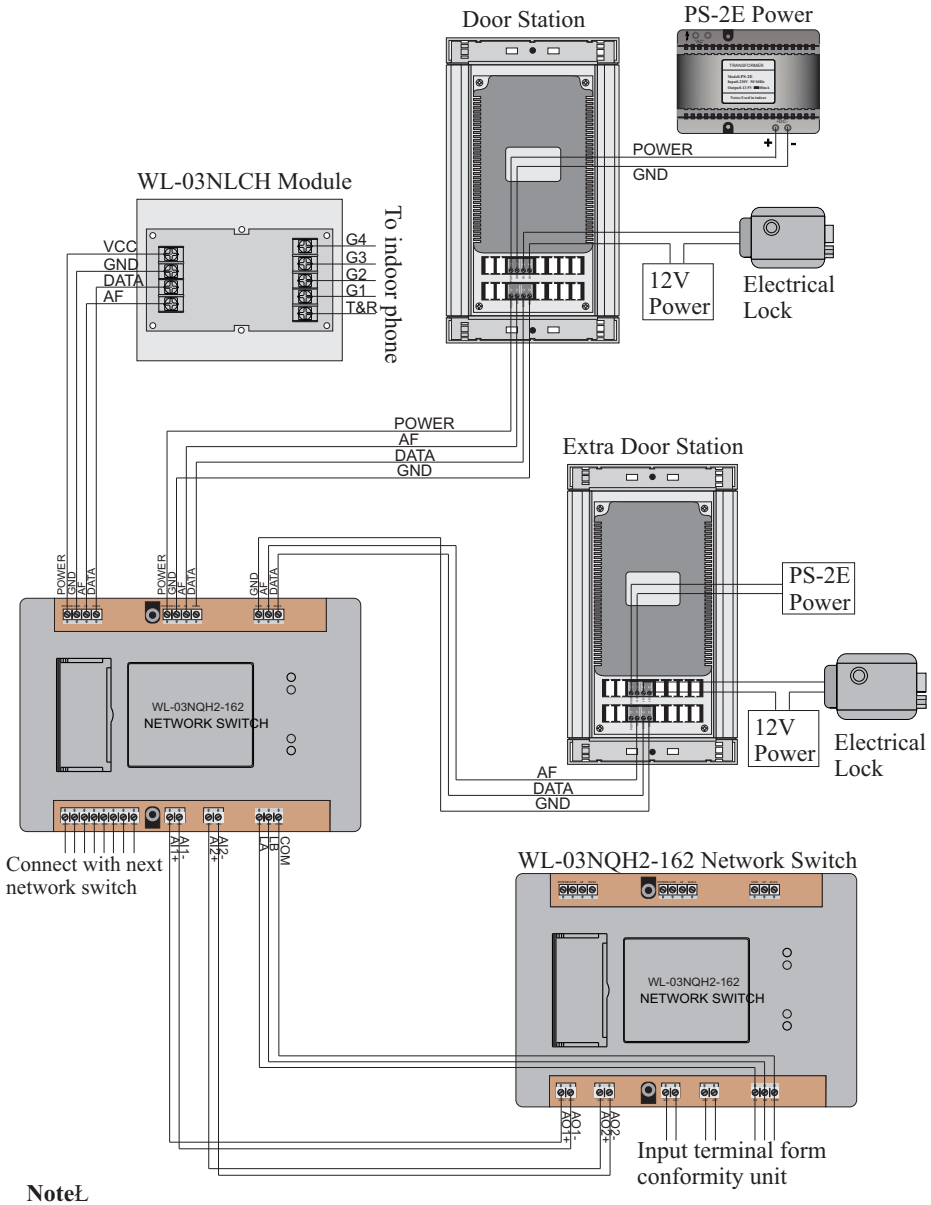


NoteŁ

Wires between network switches :the audio output(AO) of the first network switch are connected with the corresponding audio input(AI) of the next network switch. The data wire COMˇLAˇLB should be connected accordingly.

ˇWiring among switch , module and door station:

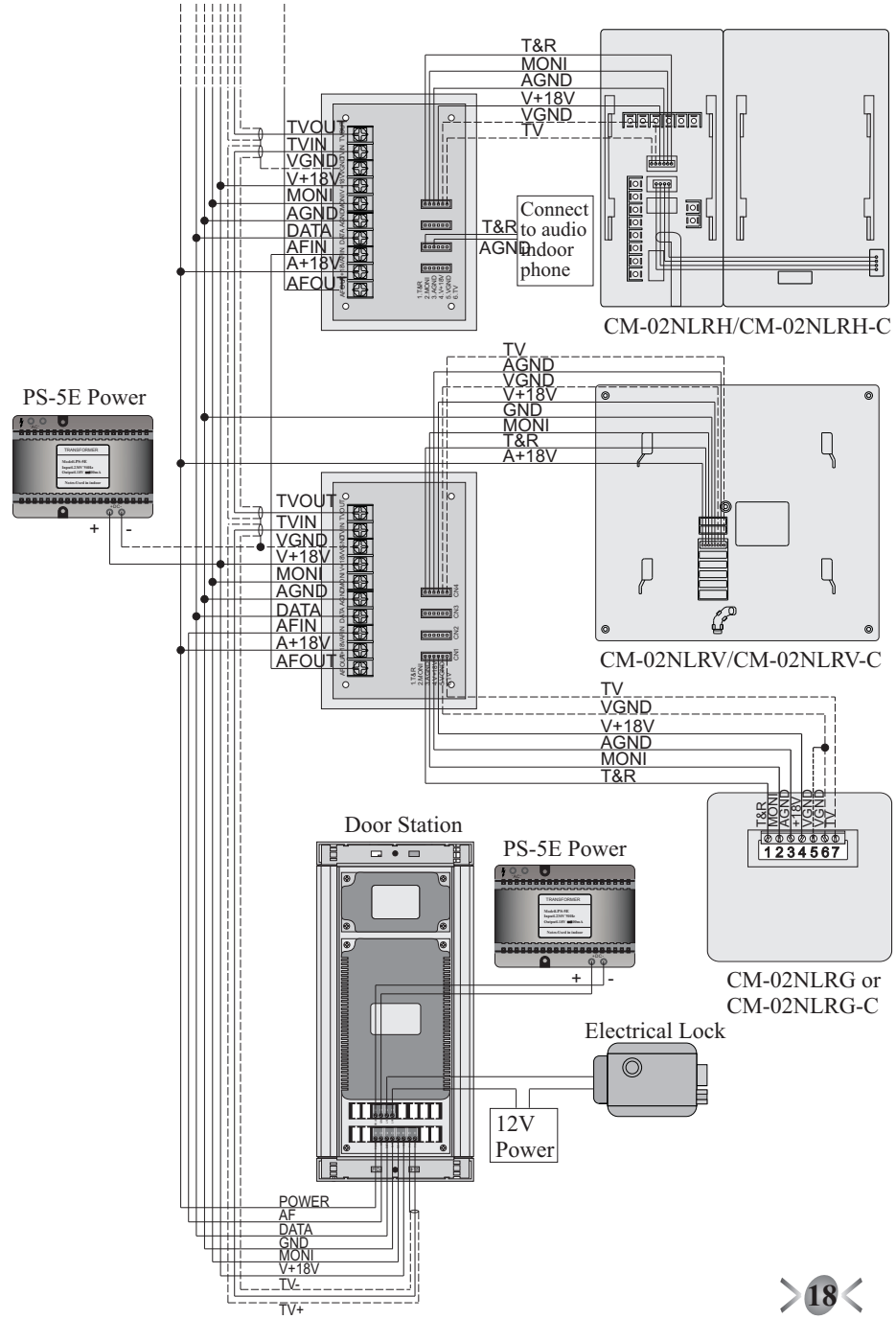
a)Wiring among WL-03NQH2-162 switch, WL-03NLCH-162 module and door station:



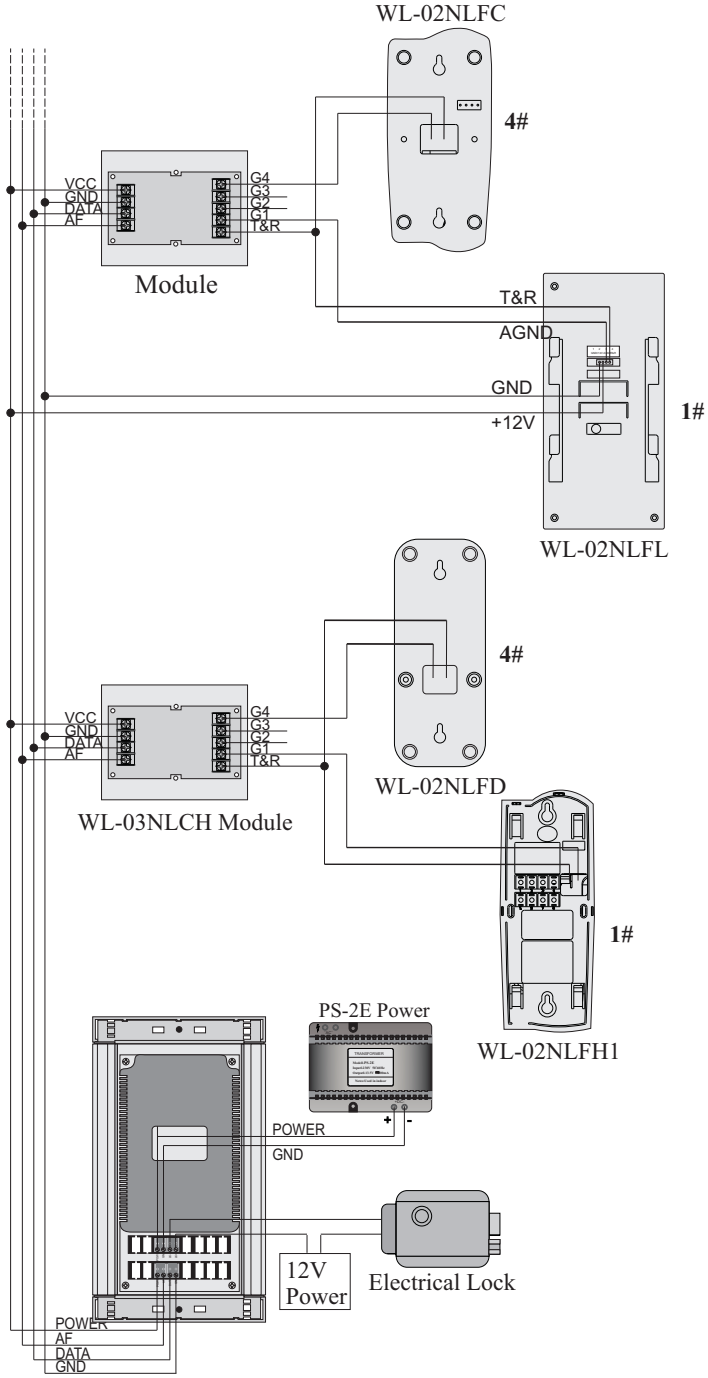
NoteŁ

Wires between network switches :the audio output(AO) of the first network switch are connected with the corresponding audio input(AI) of the next network switch. The data wire COMˇLAˇLB should be connected accordingly.

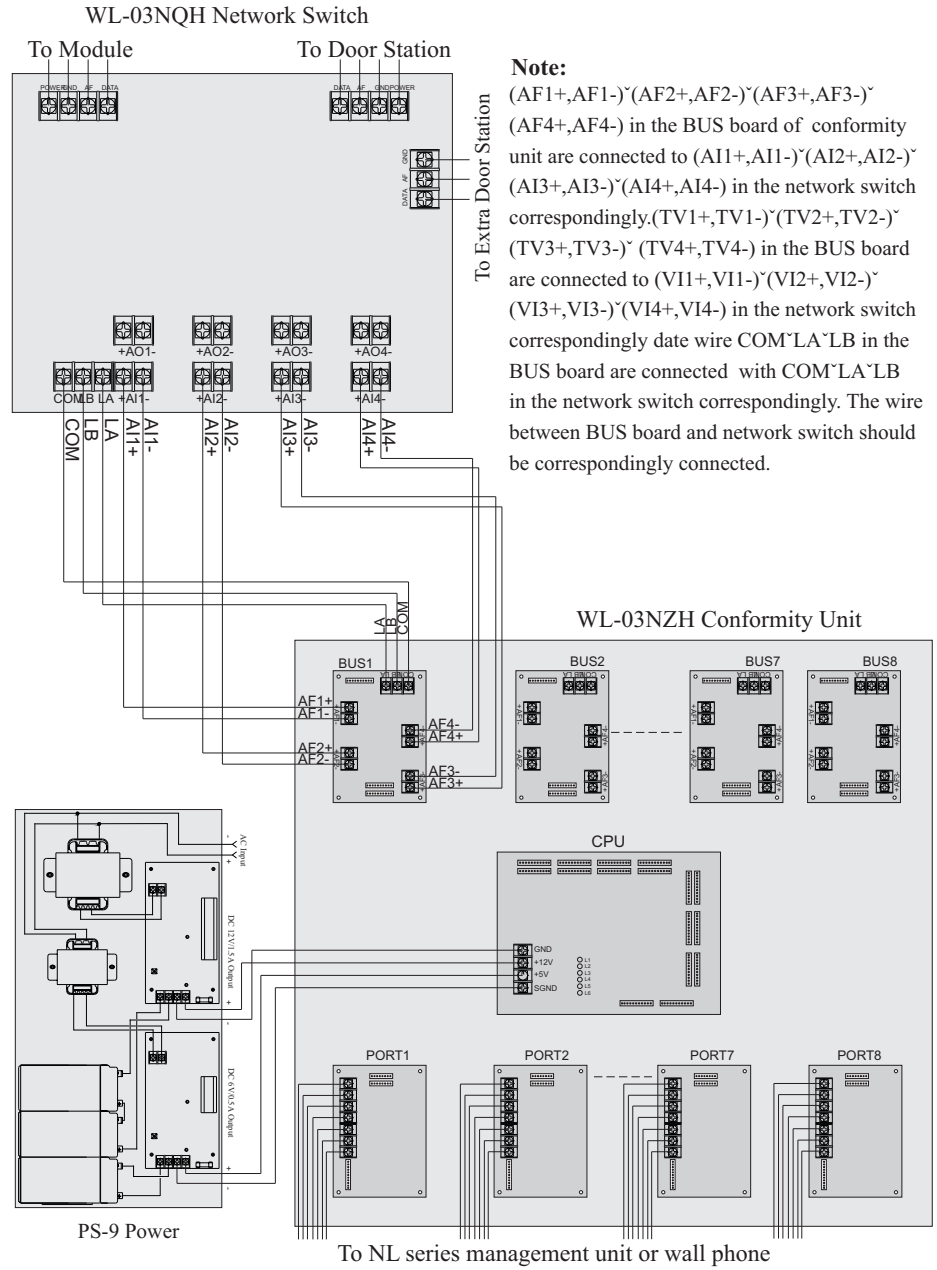
(3)Video system-3(module CM-03NLCH)Ł



2.Non network wiring for audio systemŁ



b)Wiring between conformity unit and WL-03NQH switch (2 route ways):

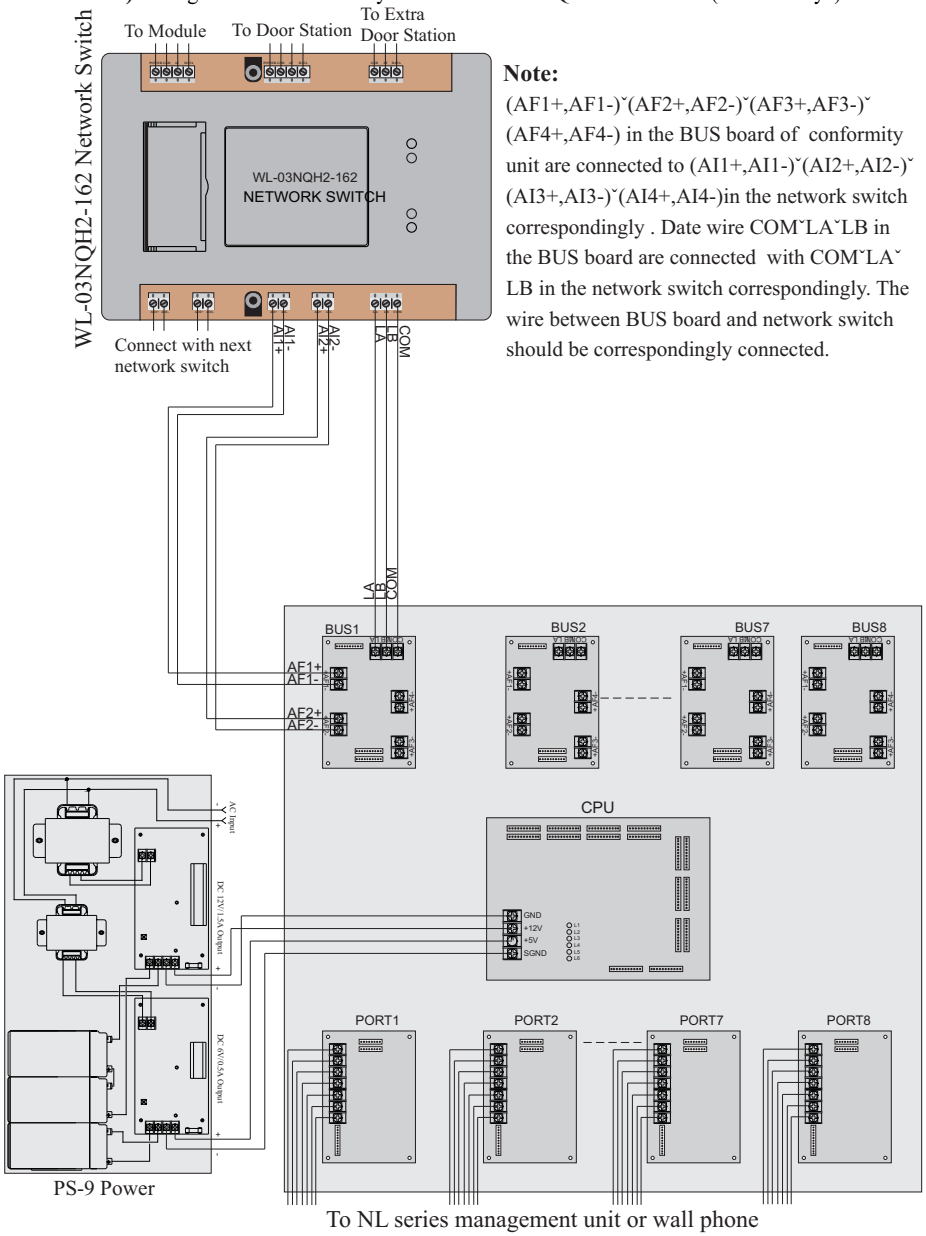


Note:
(AF1+,AF1-)ˇ(AF2+,AF2-)ˇ(AF3+,AF3-)ˇ(AF4+,AF4-) in the BUS board of conformity unit are connected to (AI1+,AI1-)ˇ(AI2+,AI2-)ˇ(AI3+,AI3-)ˇ(AI4+,AI4-) in the network switch correspondingly.(TV1+,TV1-)ˇ(TV2+,TV2-)ˇ(TV3+,TV3-)ˇ (TV4+,TV4-) in the BUS board are connected to (VI1+,VI1-)ˇ(VI2+,VI2-)ˇ(VI3+,VI3-)ˇ(VI4+,VI4-) in the network switch correspondingly date wire COMˇLAˇLB in the BUS board are connected with COMˇLAˇLB in the network switch correspondingly. The wire between BUS board and network switch should be correspondingly connected.

(2)Network wiring for audio system

ˇWiring between conformity unit and switch:

a)Wiring between conformity unit and CM-03NQH2-162 switch (2 route ways):



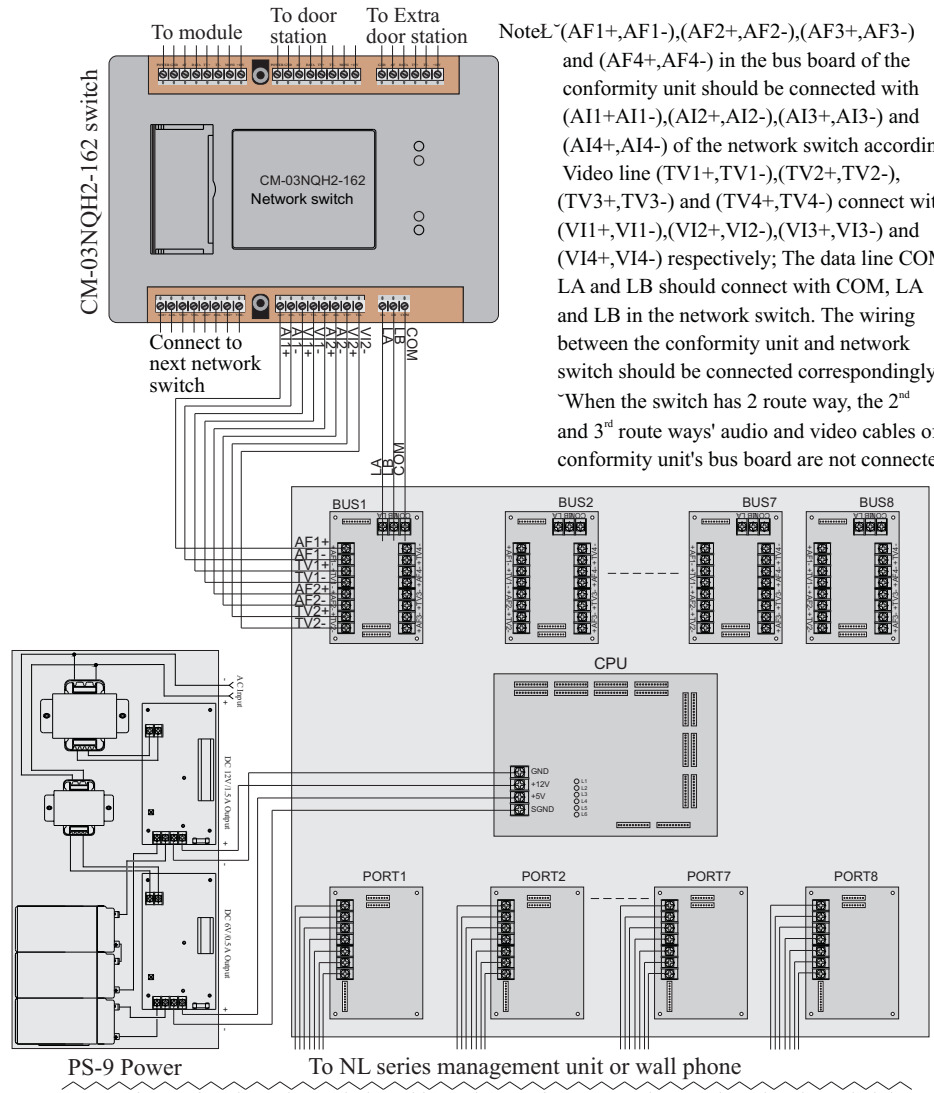
Note:
(AF1+,AF1-)ˇ(AF2+,AF2-)ˇ(AF3+,AF3-)ˇ(AF4+,AF4-) in the BUS board of conformity unit are connected to (AI1+,AI1-)ˇ(AI2+,AI2-)ˇ(AI3+,AI3-)ˇ(AI4+,AI4-)in the network switch correspondingly . Date wire COMˇLAˇLB in the BUS board are connected with COMˇLAˇLB in the network switch correspondingly. The wire between BUS board and network switch should be correspondingly connected.

3.Network system wiringŁ

(1)Network wiring for video system

ˇWiring between conformity unit and switch:

a)**Wiring between conformity unit and** CM-03NQH2-162 **switch (2 route ways):**



NoteŁˇ(AF1+,AF1-),(AF2+,AF2-),(AF3+,AF3-) and (AF4+,AF4-) in the bus board of the conformity unit should be connected with (AI1+AI1-),(AI2+,AI2-),(AI3+,AI3-) and (AI4+,AI4-) of the network switch accordingly. Video line (TV1+,TV1-),(TV2+,TV2-),(TV3+,TV3-) and (TV4+,TV4-) connect with (VI1+,VI1-),(VI2+,VI2-),(VI3+,VI3-) and (VI4+,VI4-) respectively; The data line COM, LA and LB should connect with COM, LA and LB in the network switch. The wiring between the conformity unit and network switch should be connected correspondingly. ˇWhen the switch has 2 route way, the 2nd and 3rd route ways' audio and video cables of conformity unit's bus board are not connected.

Note: The conformity unit's main board is made out of 8 BUS and PORT boards. The switch is one ,two or four route way. The bus wires quantity depends on the amount of BUS boards and wall phones .The management unit's connects to PORT quantity of wires on the PORT board. One BUS board supports 4 outputs at most. over 200m one BUS board can maximally support 32 switches, if there is no relay equipment. One PORT board can connect with only one management unit or only wall phone . The conformity unit cost depends on the quantity of BUS and PORT boards used.

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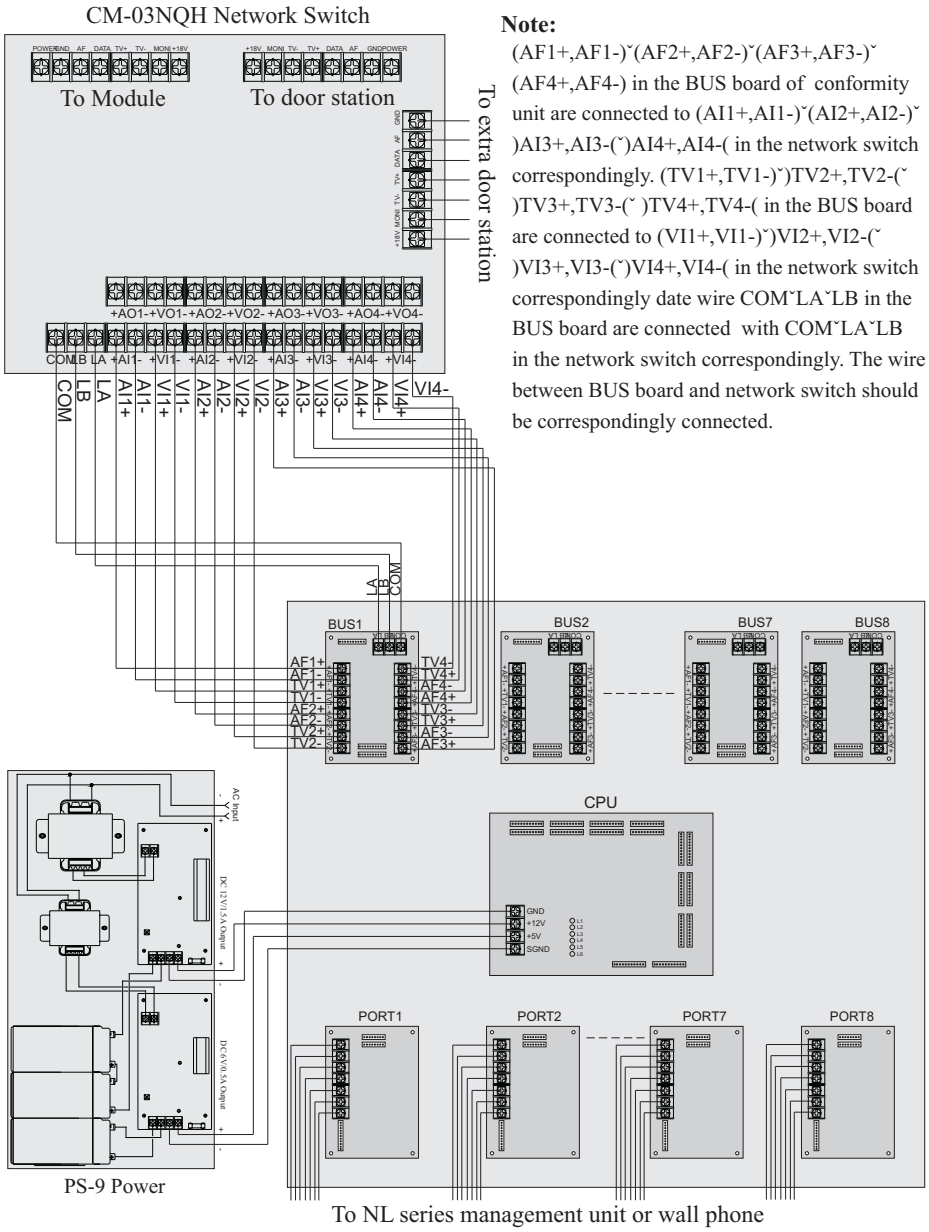
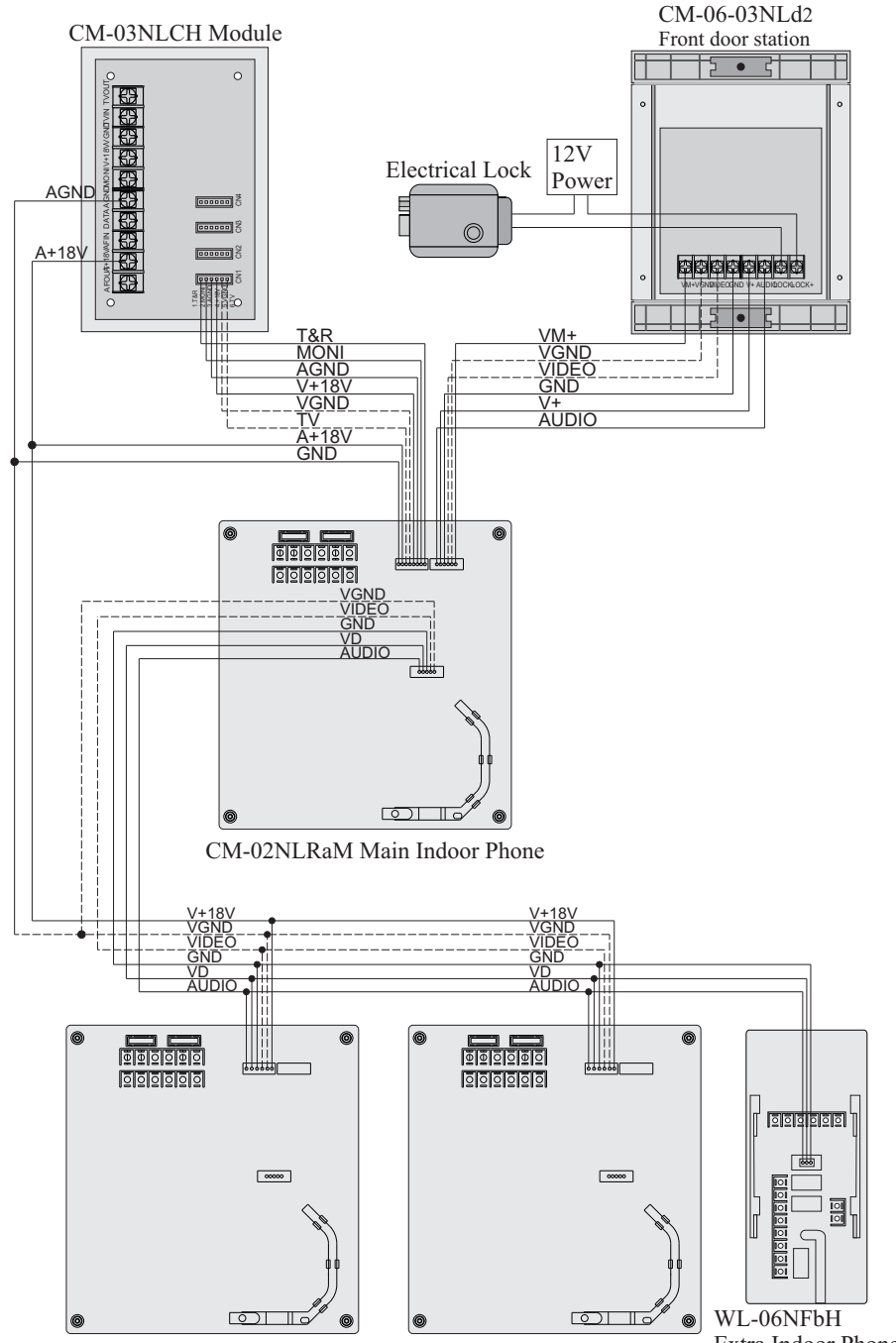
b)Wiring between conformity unit and NQH،٣-CM switch (4 route ways):



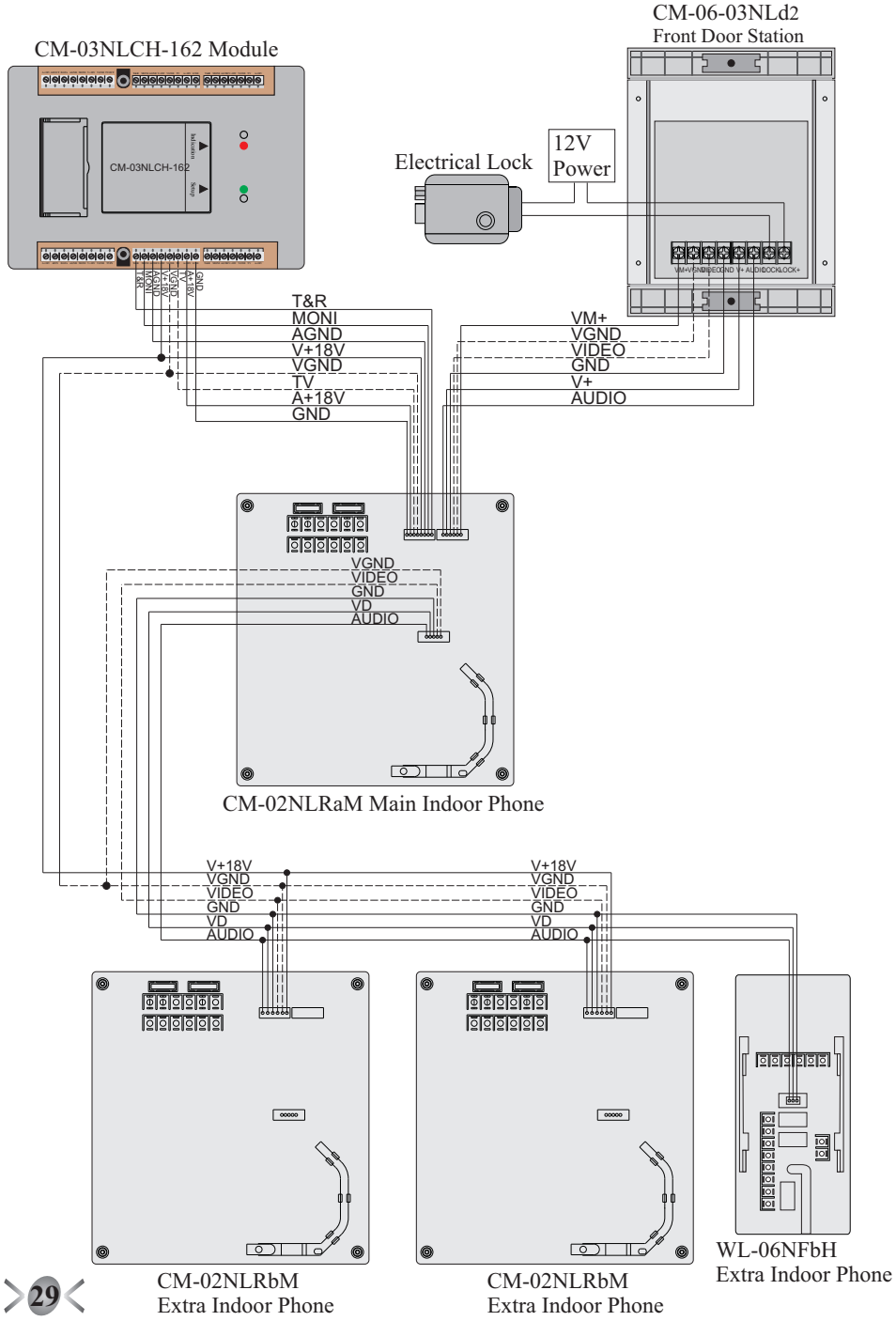
Note:

(AF1+,AF1-)ˇ(AF2+,AF2-)ˇ(AF3+,AF3-)ˇ(AF4+,AF4-) in the BUS board of conformity unit are connected to (AI1+,AI1-)ˇ(AI2+,AI2-)ˇ)AI3+,AI3-(ˇ)AI4+,AI4-(in the network switch correspondingly. (TV1+,TV1-)ˇ)TV2+,TV2-(ˇ)TV3+,TV3-(ˇ)TV4+,TV4-(in the BUS board are connected to (VI1+,VI1-)ˇ)VI2+,VI2-(ˇ)VI3+,VI3-(ˇ)VI4+,VI4-(in the network switch correspondingly date wire COMˇLAˇLB in the BUS board are connected with COMˇLAˇLB in the network switch correspondingly. The wire between BUS board and network switch should be correspondingly connected.

e)Wiring between CM-03NLCH module and CM-02NLRaM main indoor phoneŁ

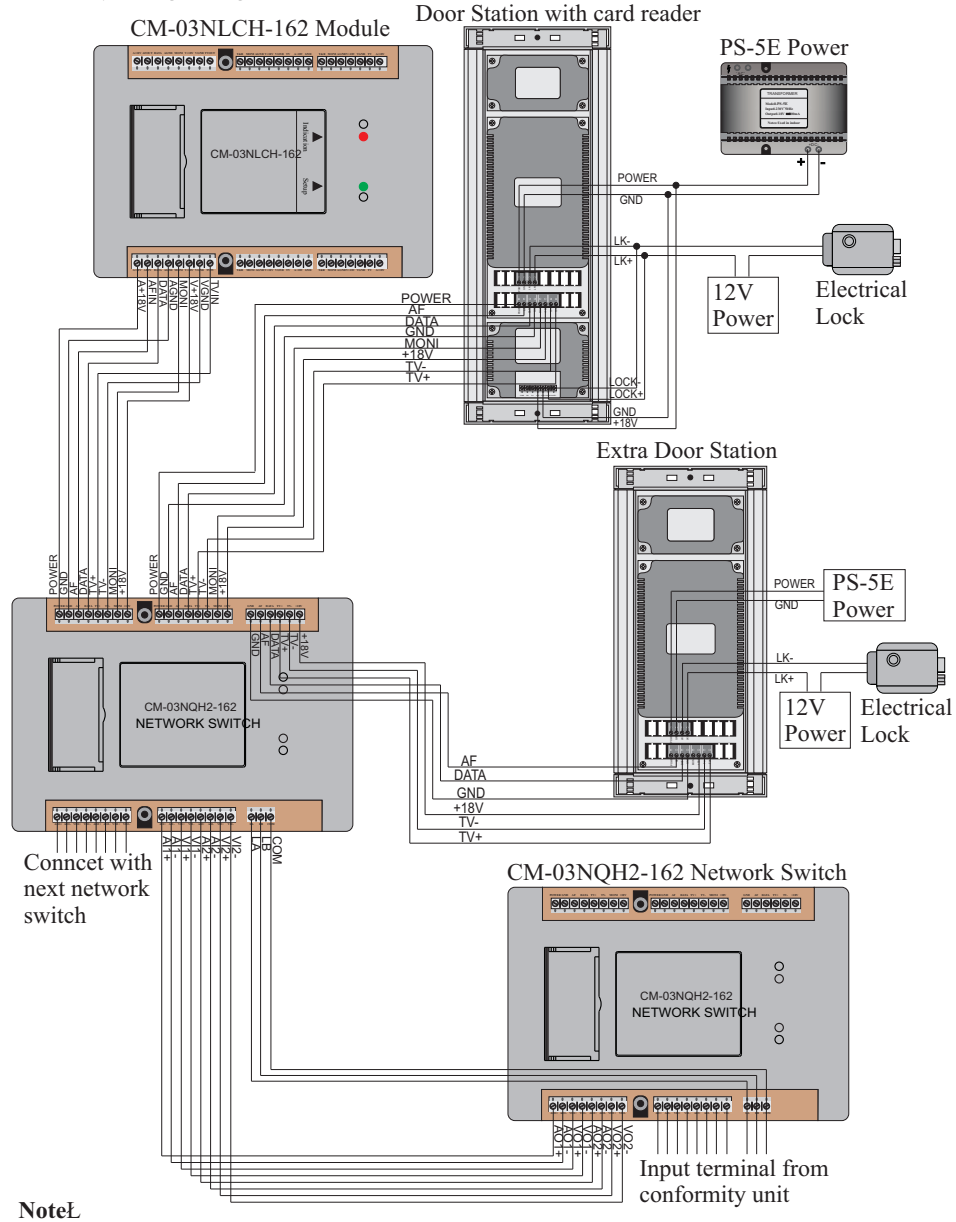


d)Wiring between CM-03NLCH-162module and CM-02NLRaM main indoor phoneŁ



˘Wiring among switch , module and door station:

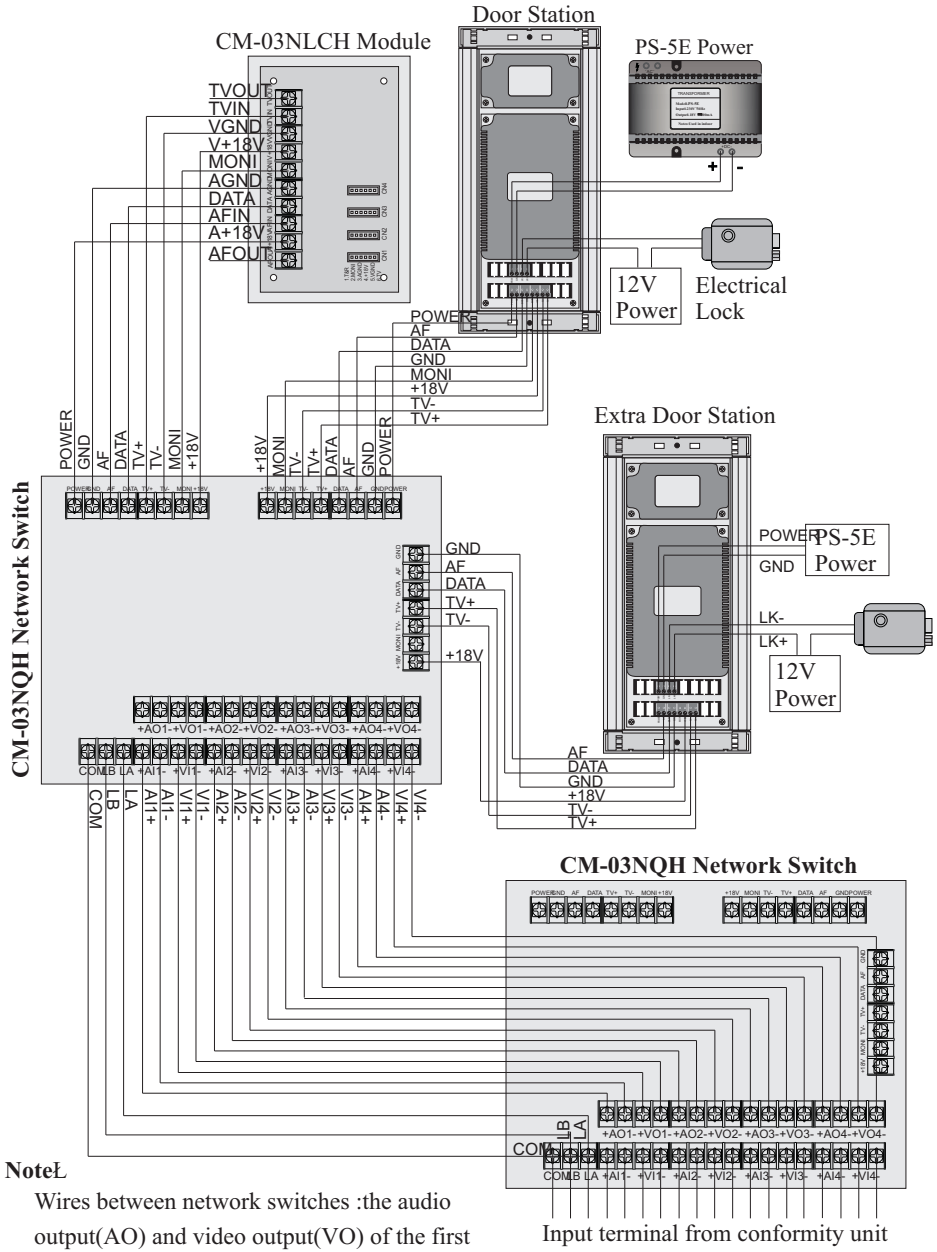
a)Wiring among CM-03NQH2-162 switch, CM-03NLCH-162 module and door station:



NoteŁ

Wires between network switches :the audio output(AO) and video output(VO) of the first network switch are connected with the corresponding audio input(AI) and video input(VI) of the next network switch. The data wire COMˇLAˇLB should be connected accordingly.

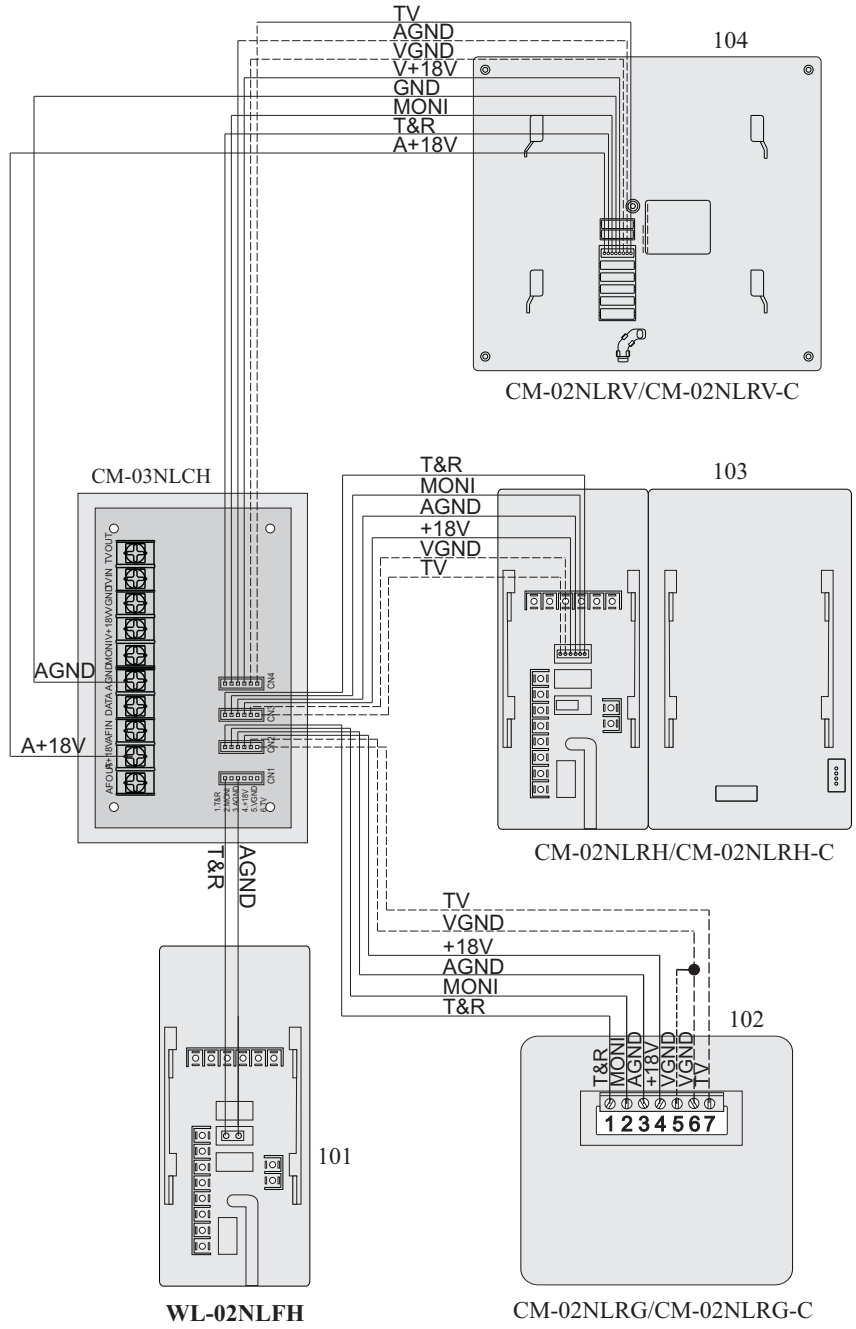
b)Wiring among CM-03NQH switch,CM-03NLCH module and door stationŁ



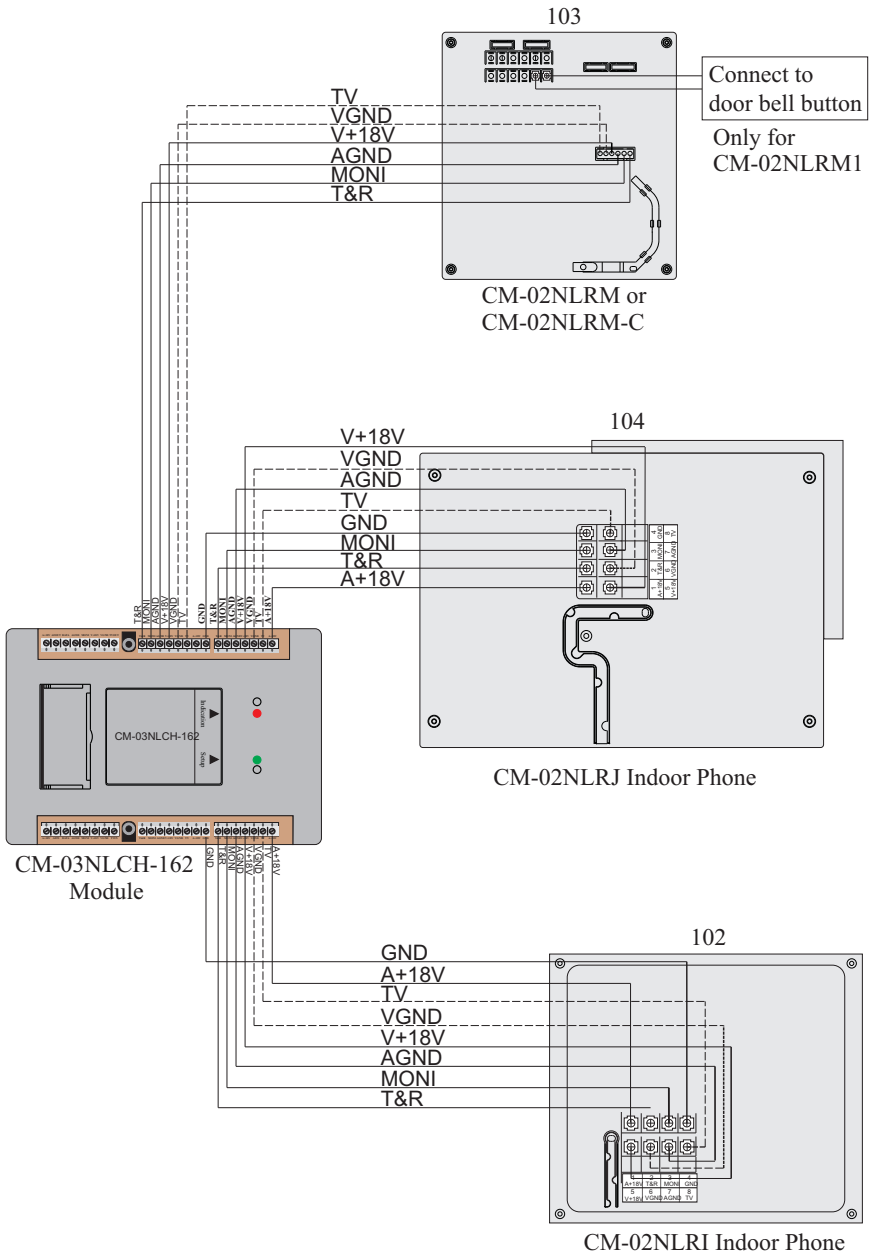
NoteŁ

Wires between network switches :the audio output(AO) and video output(VO) of the first network switch are connected with the corresponding audio input(AI) and video input(VI) of the next network switch. The data wire COMˇLAˇLB should be connected accordingly.

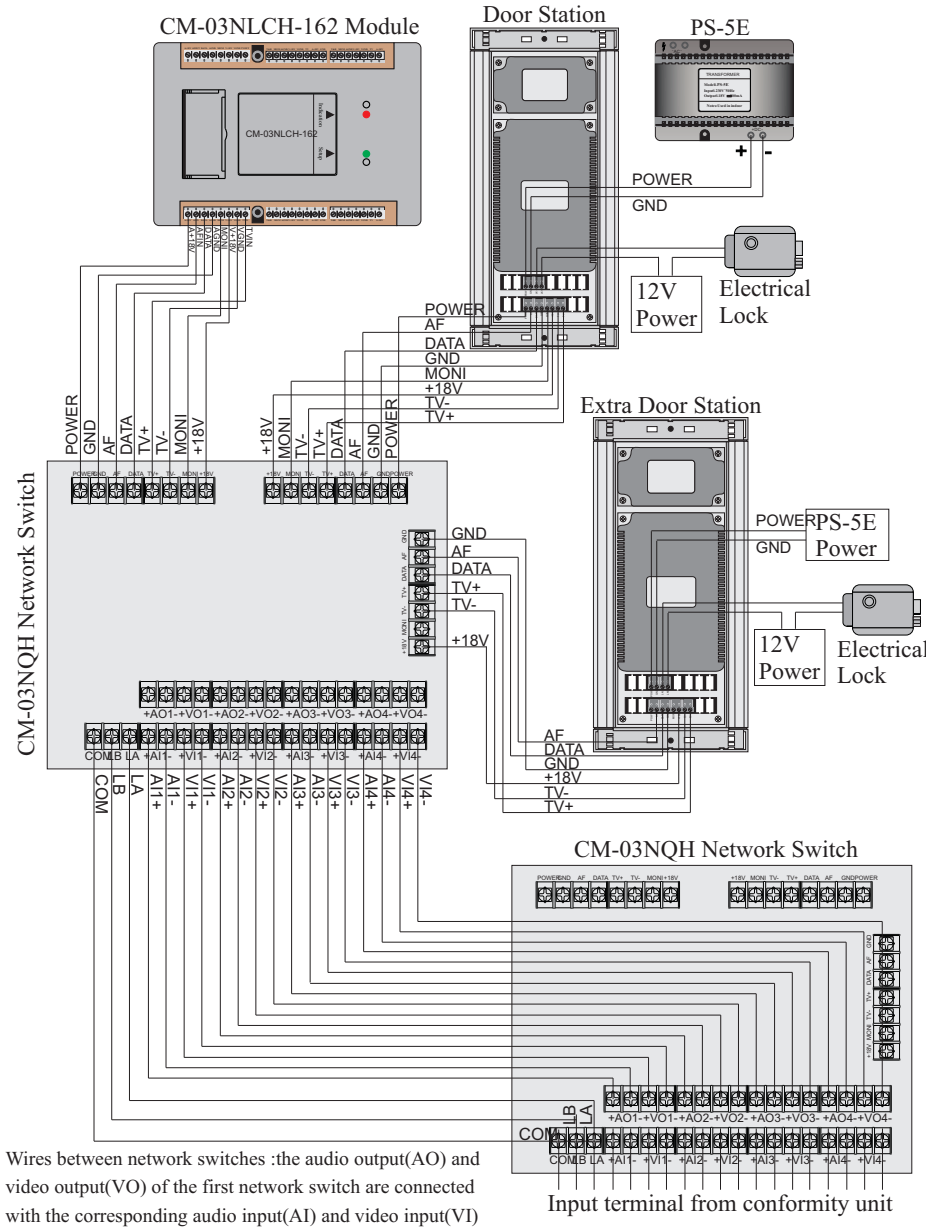
c)Wiring between CM-03NLCH module and indoor phoneŁ



b)Wiring between CM-03NLCH-162 module and indoor phoneŁ



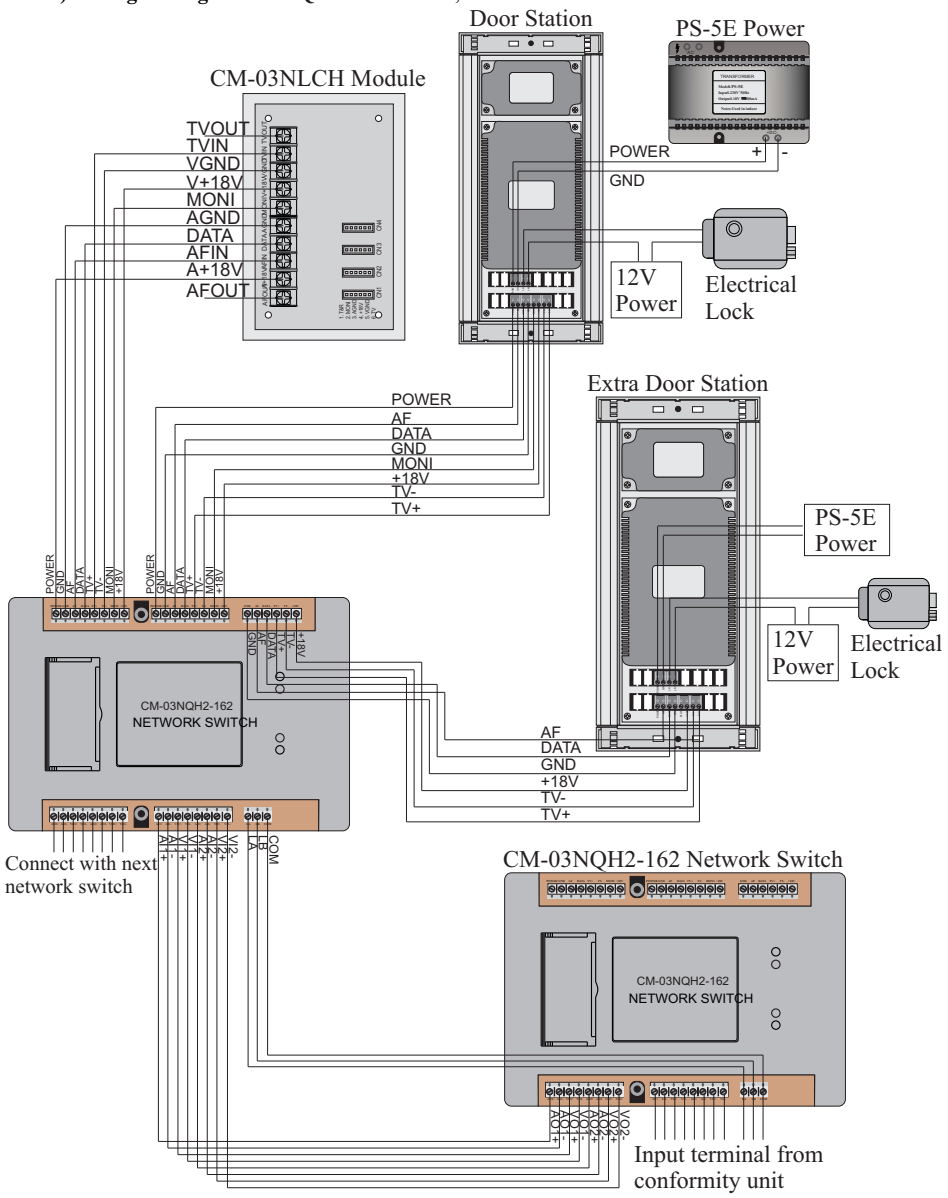
c)Wiring among CM-03NQH switch,CM-03NLCH-162 module and door stationŁ



Wires between network switches :the audio output(AO) and video output(VO) of the first network switch are connected with the corresponding audio input(AI) and video input(VI) of the next network switch. The data wire COM˜LA˜LB should be connected accordingly.

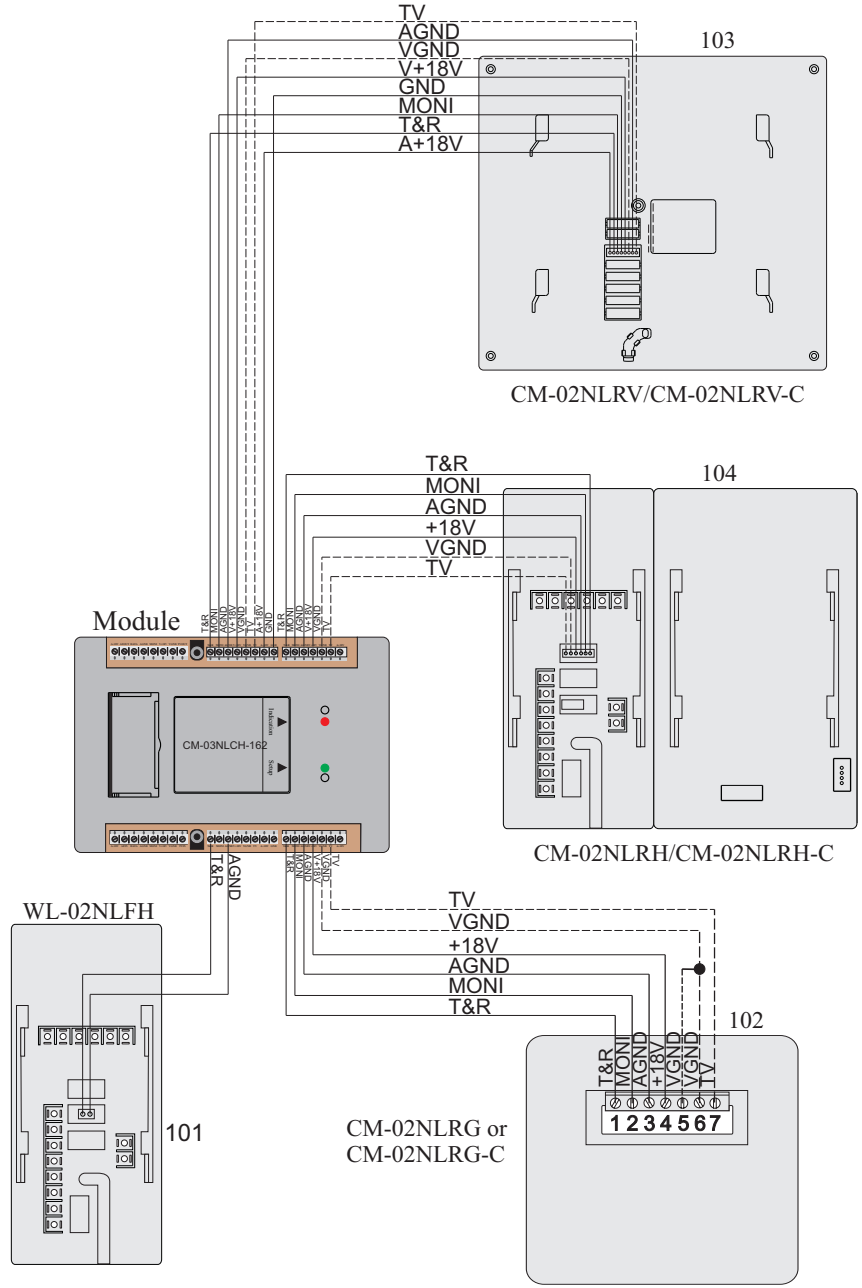
NoteŁThe genenal wiring should be done with loose wires . If you can not use a cable but only loose wires, then you need a repeater. If the distance is less than 100 meters,(if it is more than 100 meters you will need a repeater)one network switch can connect with 100 modules, and one module can connect with 4 indoor phones.

d)Wiring among CM-03NQH2-162 switch,CM-03NLCH module and door stationŁ



NoteŁ

Wires between network switches :the audio output(AO) and video output(VO) of the first network switch are connected with the corresponding audio input(AI) and video input(VI) of the next network switch. The data wire COMˇLAˇLB should be connected accordingly.

ˇWiring between module and indoor phoneŁ

a)Wiring between CM-03NLCH-162 module and indoor phoneŁ